United States Department of Agriculture

NRCS

Natural Resources Conservation Service

In cooperation with University of Georgia, College of Agricultural and Environmental Sciences, Agricultural Experiment Stations

Soil Survey of Effingham County, Georgia

How To Use This Soil Survey

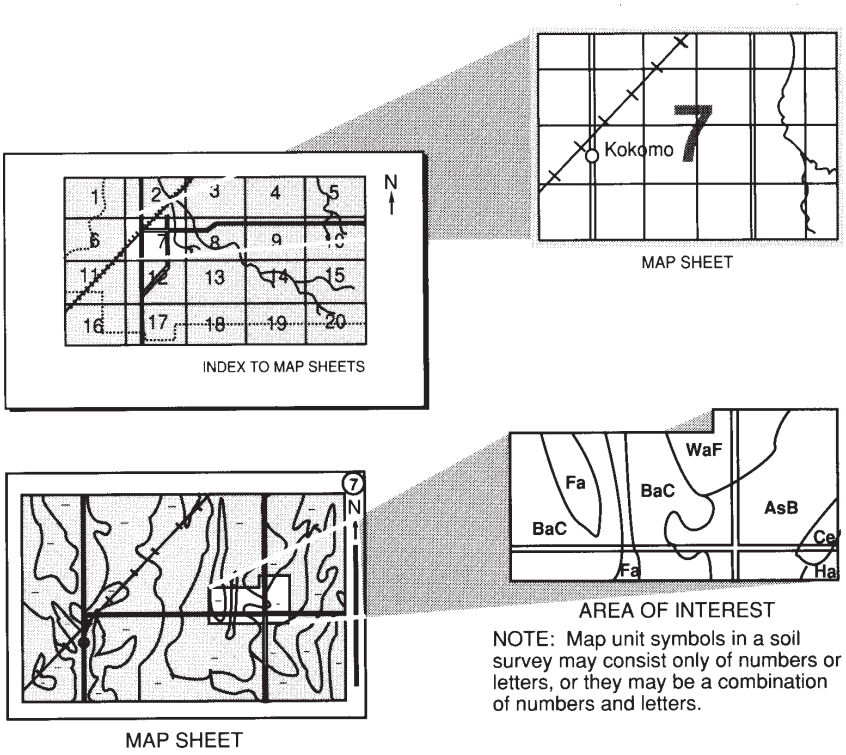
Detailed Soil Maps

The detailed soil maps can be useful in planning the use and management of small areas.

To find information about your area of interest, locate that area on the **Index to Map Sheets**. Note the number of the map sheet and turn to that sheet.

Locate your area of interest on the map sheet. Note the map unit symbols that are in that area. Turn to the **Contents**, which lists the map units by symbol and name and shows the page where each map unit is described.

The **Contents** shows which table has data on a specific land use for each detailed soil map unit. Also see the **Contents** for sections of this publication that may address your specific needs.



NOTE: Map unit symbols in a soil survey may consist only of numbers or letters, or they may be a combination of numbers and letters.

National Cooperative Soil Survey

This soil survey is a publication of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (formerly the Soil Conservation Service) has leadership for the Federal part of the National Cooperative Soil Survey. This survey was made cooperatively by the Natural Resources Conservation Service and the University of Georgia, College of Agricultural and Environmental Sciences, Agricultural Experiment Stations. The survey is part of the technical assistance furnished to the Ogeechee River Soil and Water Conservation District.

Major fieldwork for this soil survey was completed in 2003. Soil names and descriptions were approved in 2007. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 2007. The most current official data are available on the Internet.

Soil maps in this survey may be copied without permission. Enlargement of these maps, however, could cause misunderstanding of the detail of mapping. If enlarged, maps do not show the small areas of contrasting soils that could have been shown at a larger scale.

Nondiscrimination Statement

Cover Caption

Soybeans in an area of Clarendon loamy sand, 0 to 2 percent slopes. This prime farmland is well suited to cultivated crops.

Additional information about the Nation's natural resources is available online from the Natural Resources Conservation Service at http://www.nrcs.usda.gov.

Contents

Issued 2008

Foreword

Soil surveys contain information that affects land use planning in survey areas. They include predictions of soil behavior for selected land uses. The surveys highlight soil limitations, improvements needed to overcome the limitations, and the impact of selected land uses on the environment.

Soil surveys are designed for many different users. Farmers, ranchers, foresters, and agronomists can use the surveys to evaluate the potential of the soil and the management needed for maximum food and fiber production. Planners, community officials, engineers, developers, builders, and home buyers can use the surveys to plan land use, select sites for construction, and identify special practices needed to ensure proper performance. Conservationists, teachers, students, and specialists in recreation, wildlife management, waste disposal, and pollution control can use the surveys to help them understand, protect, and enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. The information in this report is intended to identify soil properties that are used in making various land use or land treatment decisions. Statements made in this report are intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

These and many other soil properties that affect land use are described in this soil survey. The location of each soil is shown on the detailed soil maps. Each soil in the survey area is described, and information on specific uses is given. Help in using this publication and additional information are available at the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

James E. Tillman, Sr.
State Conservationist
Natural Resources Conservation Service

Soil Survey of
Effingham County, Georgia

By Casey Sowell, Natural Resources Conservation Service

Fieldwork by Casey Sowell, Mack Thomas Jr., and Herschel L. Paulk, Natural Resources Conservation Service

United States Department of Agriculture, Natural Resources Conservation Service, in cooperation with
University of Georgia, College of Agricultural and Environmental Sciences, Agricultural Experiment Stations

Effingham County is in the southeastern part of Georgia (fig. 1). It has a total area of 308,500 acres, or about 483 square miles. Springfield is the county seat.

General Nature of the Survey Area

This section provides general information about the survey area. It describes history and settlement; physiography, relief, and drainage; geology; and climate.

History and Settlement

Edna Morgan, Effingham County Historical Society, helped prepare this section.

On March 12, 1734, exactly 13 months after James Edward Oglethorpe landed in Georgia, the “Purysburg” sailed up the Savannah River bringing a new group of settlers from Salzburg (which is presently in Austria). These German-speaking Salzburger Lutherans, under the leadership of Reverend John Martin Boltzius and Reverend Israel Christian Gronau, were in search of religious freedom.

Oglethorpe, accompanied by Gronau and a few others, selected a spot on a creek about 25 miles northwest of Savannah, near present-day Log Landing Road, where he wanted a settlement for military purposes. Gronau named the spot and the creek Ebenezer, “Stone of Help.” Before a settlement could be established, a road had to be cut and built from Abercorn to the spot. Shelters had to be built for the settlers, who soon discovered that this was an unsuitable place. The area was too swampy to sustain crops and livestock. A scout was soon sent out in search of a better area. He found a high bluff on the Savannah River a short distance away and thought it a more desirable spot. Reverend Boltzius petitioned Oglethorpe for permission to move. Oglethorpe finally agreed on condition that the shelters remain where they were.

In 1736, the Salzburgers moved from Old Ebenezer to New Ebenezer where a town had been laid out and land assigned for home lots and farms. Many of the settlers died, but transports bought others and the town grew. In addition to homes, a school, orphanage, gristmill, and wooden church were built. The church was later replaced by one constructed of brick which the Salzburgers made from the clay found

Figure 1.—Location of Effingham County in Georgia.

in the river banks. This church, Jerusalem Evangelical Lutheran Church, is still used today and is the oldest religious building in continuous use in the United States.

When Georgia was relinquished by the Trustees to the Crown in 1752, the colony was divided into parishes. Ebenezer with the surrounding area was named St. Matthew Parish and retained that designation until the Revolutionary War. In 1777, a constitution was adopted for the state of Georgia. Former parishes were renamed as counties. St. Matthew Parish became Effingham County in honor of Lord Effingham, who had befriended the colonies in the British Parliament. John Adam Treutlen, owner of a large plantation at Sisters' Ferry in Effingham County, became the first Governor of Georgia elected under the Constitution of 1777.

Effingham County's first settlers were farmers, and the north end of county has continued to be predominately rural. There are three towns: Springfield, the county seat, Guyton, and Rincon. There are also several communities scattered around the county. The south part of Effingham County has seen strong population growth due to commercial and industrial growth in Effingham and surrounding counties. According to Wikipedia, the U.S. Census Bureau ranked Effingham County the 46th fastest growing county in the nation (July 2006 - July 2007). In 2000, the population was 37,535. The 2007 census estimate shows a population of 50,728 *(20)*.

Physiography, Relief, and Drainage

Effingham County is in the Atlantic Coast Flatwoods Major Land Resource Area. Elevations range from around 5 feet above mean sea level in the southeastern part of the county along the Savannah River to about 135 feet above mean sea level near Egypt in the northwestern part of the county.

Most of the upland soils occur on broad flats that are nearly level or gently sloping. These soils range from somewhat poorly drained to somewhat excessively drained. Most of these soils have a sandy surface layer overlying a sandy subsurface layer or loamy subsoil. The uplands are dissected by sluggish drains and depressions. Soils in these drains and depressions are very poorly drained or poorly drained, have a much higher organic matter content in the surface horizons, and are often flooded. These soils are sandy or loamy throughout.

Effingham County is drained by the Savannah and Ogeechee Rivers and their tributaries. The Savannah River forms the eastern boundary of Effingham County. Most of the north and central parts of the county are drained by Ebenezer Creek, which enters the Savannah River at Ebenezer Landing. Other important tributaries entering the Savannah River and draining the southern and southeastern parts of the county include Lockner, Dasher, Sweigoffer, Mill, Bear, Big Collis, and Abercorn Creeks. The Ogeechee River forms the western boundary of Effingham County. Tributaries draining the western edge of the county include Shrimp Creek, Mill Creek, and Little Ogeechee River.

Geology

Mark Hall, Geologist, Natural Resources Conservation Service, prepared this section.

Effingham County is located in the Barrier Island Sequence District of the Coastal Plain Physiographic Province *(3)*. The district is characterized by marine terraces which formed by a series of rises and falls in sea level during the Pleistocene Epoch. Earlier work attempted to correlate the stratigraphic sequences in the area to these terraces; however, more recent investigations show that the marine terraces are physiographic in nature and independent of the underlying stratigraphy (geology) *(7, 9)*. The stratigraphic units described here are those proposed by Huddlestun in 1988.

The majority of the surface geology of Effingham County is comprised of the Cypresshead Formation. This formation is Pliocene in age (deposited 2.5 to 3 million years ago) and disconformably overlies the sediment formations which comprise the Hawthorne Group, an older, Miocene stratigraphic sequence that was deposited between 13 and 23 million years ago *(7)*. These units typically strike to the northeast and gently dip southeast at approximately 8 to 14 feet per mile. The Hawthorne Group formations outcrop in ascending order toward the south-southeast (down the dip) in the low-lying areas near the Savannah River and its tributaries.

Huddlestun described the Cypresshead Formation as a coastal beach/sound deposit and divides the formation into two gross lithofacies, an updip lithofacies and a downdip lithofacies. The downdip lithofacies is the more distinctive lithology of the formation and is characterized by thinly bedded, fine-grained, well sorted sand with thin layers of clay dispersed throughout the sand. The updip lithofacies is a coarse-grained, well to poorly sorted sand with conspicuous cross-bedding. The weathered sand is typically reddish brown or orange, and the thin clay layers are white. The formation can be distinguished from the underlying Hawthorne Group formations “in being prominently horizontal- and cross-bedded, nonphosphatic, in containing little interstitial clay, and in commonly containing burrows and bioturbation structures” *(7)*.

Hawthorne Group sediments were deposited in a shallow marine, continental shelf environment *(7)*. The Hawthorne Group formations that are exposed in Effingham County are, in ascending order, the Porters Landing Member of the Parachucla Formation, the Marks Head Formation, and the Berryville Clay and Ebenezer Members of the Coosawhatchie Formation *(7)*.

The statements in the following paragraph are how Huddlestun describes these lithologies *(7)*:

The Porters Landing Member of the Parachucla Formation is a thick bedded, fine- to medium-grained sand and clay with the sand being the predominant component and the clay occurring as both discrete beds and interstitially in the sand. The type locality for this member is located in northern Effingham County, along the Savannah River, 5.5 miles southeast of Blue Springs. The Marks Head Formation is a phosphatic, argillaceous, sand to sandy clay with scattered beds of dolostone, limestone, and siliceous claystone. The dominant clay mineral in the Marks Head Formation is palygorskite in contrast to smectite of the other Hawthorne Group formations. The best outcrops of this formation can be found at Porters Landing. The Berryville Member of the Coosawhatchie Formation is a yellowish gray to light olive gray, silty, phosphatic clay. The type locality of the Berryville Clay is at Berry Landing, approximately 3.3 miles east of Berryville. The Ebenezer Member is a gray to olive gray, slightly phosphatic, micaceous, argillaceous, fine- to medium-grained, moderately well to well sorted sand. The type locality is located along the bluffs of Ebenezer Landing in Ebenezer.

Climate

Table 1 gives data on temperature and precipitation for the survey area as recorded at Ridgeland, Georgia, in the period 1971 to 2000. Table 2 shows probable dates of the first freeze in fall and the last freeze in spring. Table 3 provides data on the length of the growing season.

In winter, the average temperature is 50.5 degrees F and the average daily minimum temperature is 39.1 degrees. The lowest temperature on record, which occurred at Ridgeland on January 21, 1985, is 2 degrees. In summer, the average temperature is 79.6 degrees and the average daily maximum temperature is 90.0 degrees. The highest temperature, which occurred at Ridgeland on June 27, 1950, is 107 degrees.

Growing degree days are shown in table 1. They are equivalent to “heat units.” During the month, growing degree days accumulate by the amount that the average temperature each day exceeds a base temperature (50 degrees F). The normal monthly accumulation is used to schedule single or successive plantings of a crop between the last freeze in spring and the first freeze in fall.

The average annual total precipitation is 51.37 inches. Of this, 39.96 inches, or about 78 percent, usually falls in March through November. The growing season for most crops falls within this period. The heaviest 1-day rainfall during the period of record was 7.75 inches, recorded at Ridgeland on August 26, 1961. Thunderstorms occur on about 62 days each year, and most occur in July.

The average seasonal snowfall is 0.6 inch. The greatest snow depth at any one time during the period of record was 4 inches, recorded on December 23, 1989. On an average, 0 days per year have at least 1 inch of snow on the ground. The heaviest 1-day snowfall on record was 4.0 inches, recorded on December 23, 1989.

The average relative humidity in mid-afternoon is about 54 percent. Humidity is higher at night, and the average at dawn is about 86 percent. The sun shines 62 percent of the time possible in summer and 62 percent in winter. The prevailing wind is from the south. Average windspeed is highest, 8.8 miles per hour, in February and March.

How This Survey Was Made

This survey was made to provide information about the soils and miscellaneous areas in the survey area. The information includes a description of the soils and miscellaneous areas and their location and a discussion of their suitability, limitations, and management for specified uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They dug many holes to study the soil profile, which is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

The soils and miscellaneous areas in the survey area are in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Detailed Soil Map Units

The map units delineated on the detailed soil maps in this survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this section, along with the maps, can be used to determine the suitability and potential of a unit for specific uses. They also can be used to plan the management needed for those uses.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. The contrasting components are mentioned in the map unit descriptions. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives the principal hazards and limitations to be considered in planning for specific uses.

Soils that have profiles that are almost alike make up a *soil series*. All the soils of a series have major horizons that are similar in composition, thickness, and arrangement. The soils of a given series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a

soil phase commonly indicates a feature that affects use or management. For example, Fuquay loamy sand, 0 to 2 percent slopes, is a phase of the Fuquay series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Echaw-Centenary complex, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Chastain and Tawcaw loams, 0 to 2 percent slopes, frequently flooded, is an undifferentiated group in this survey area.

This survey includes *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. The Urban land component of Blanton-Fuquay-Urban land complex, 0 to 5 percent slopes, is an example.

Table 4 lists the map units in this survey area. Other tables give properties of the soils and the limitations, capabilities, and potentials for many uses. The Glossary defines many of the terms used in describing the soils.

AbA—Albany sand, 0 to 2 percent slopes

Map Unit Composition

Albany and similar soils: About 90 percent

Minor Components

- Leefield soils, which have a sandy surface layer that ranges from 20 to 40 inches in thickness

Description of Albany

Setting

Landform: Flats on marine terraces
Slope: Nearly level
Parent material: Loamy marine deposits and/or sandy marine deposits

Typical Profile

Surface layer:
0 to 10 inches—very dark grayish brown loamy sand

Subsurface layer:
10 to 25 inches—pale brown loamy sand that has yellowish brown mottles
25 to 47 inches—yellowish brown loamy sand that has prominent brown and light gray mottles

Subsoil:
47 to 60 inches—gray sandy clay loam that has strong brown mottles
60 to 80 inches—light brownish gray sandy clay loam that has red and strong brown mottles

Component Properties and Qualities

Drainage class: Somewhat poorly drained
Water table (depth, kind): About 1.0 to 2.5 feet; apparent

Flooding: None
Ponding: None
Permeability: Slow
Available water capacity: Low
Depth class: Very deep

Component Interpretive Group

Land capability class: 3w

BdA—Bladen fine sandy loam, 0 to 2 percent slopes

Map Unit Composition

Bladen and similar soils: About 80 percent

Description of Bladen

Setting

Landform: Stream terraces
Slope: Nearly level
Parent material: Clayey fluviomarine deposits

Typical Profile

Surface layer:
0 to 7 inches—black fine sandy loam

Subsurface layer:
7 to 9 inches—light brownish gray fine sandy loam that has brownish yellow mottles
9 to 14 inches—grayish brown fine sandy loam that has yellowish brown and light brownish gray mottles

Subsoil:
14 to 30 inches—gray clay that has dark red and yellowish brown mottles
30 to 41 inches—gray clay that has dark red and yellowish brown mottles
41 to 80 inches—dark gray clay that has red and strong brown mottle

Component Properties and Qualities

Drainage class: Poorly drained
Water table (depth, kind): About 0.0 to 1.0 foot; apparent
Flooding: None
Ponding: None
Permeability: Slow
Available water capacity: Moderate
Depth class: Very deep

Component Interpretive Group

Land capability class: 6w

BfB—Blanton-Foxworth complex, 0 to 5 percent slopes

Map Unit Composition

Blanton and similar soils: About 70 percent
Foxworth and similar soils: About 20 percent

Minor Components

- Meldrim soils, which are moderately well drained and are in slightly lower landscape positions

Description of Blanton

Setting

Landform: Broad interstream divides
Slope: Nearly level or very gently sloping
Parent material: Loamy marine deposits and/or sandy marine deposits

Typical Profile

Surface layer:
0 to 8 inches—brown sand

Subsurface layer:
8 to 42 inches—light olive brown sand
42 to 60 inches—pale yellow sand
60 to 70 inches—pale yellow sand that has strong brown and light brownish gray mottles

Subsoil:
70 to 75 inches—strong brown sandy loam
75 to 80 inches—strong brown sandy clay loam

Component Properties and Qualities

Drainage class: Somewhat excessively drained
Water table (depth, kind): About 4.0 to 6.0 feet; apparent
Flooding: None
Ponding: None
Permeability: Moderately slow
Available water capacity: Very low
Depth class: Very deep

Component Interpretive Group

Land capability class: 3s

Description of Foxworth

Setting

Landform: Flats on marine terraces
Slope: Nearly level
Parent material: Sandy marine deposits

Typical Profile

Surface layer:
0 to 8 inches—dark grayish brown sand

Underlying material:
8 to 35 inches—dark yellowish brown sand
35 to 47 inches—yellowish brown sand
47 to 57 inches—yellowish brown sand that has light yellowish brown and strong brown mottles
57 to 69 inches—pale brown sand that has yellowish brown and light gray mottles
69 to 80 inches—light gray with pale brown and yellowish brown mottles

Component Properties and Qualities

Drainage class: Somewhat excessively drained
Water table (depth, kind): About 4.0 to 6.0 feet; apparent
Flooding: None
Ponding: None
Permeability: Rapid
Available water capacity: Low
Depth class: Very deep

Component Interpretive Group

Land capability class: 3s

BuB—Blanton-Fuquay-Urban land complex, 0 to 5 percent slopes

Map Unit Composition

Blanton and similar soils: About 40 percent
Fuquay and similar soils: About 30 percent
Urban land: About 30 percent

Description of Blanton

Setting

Landform: Broad interstream divides
Slope: Nearly level or very gently sloping
Parent material: Loamy marine deposits and/or sandy marine deposits

Typical Profile

Surface layer:
0 to 8 inches—brown sand

Subsurface layer:
8 to 42 inches—light olive brown sand
42 to 60 inches—pale yellow sand
60 to 70 inches—pale yellow sand that has strong brown and light brownish gray mottles

Subsoil:
70 to 75 inches—strong brown sandy loam
75 to 80 inches—strong brown sandy clay loam

Component Properties and Qualities

Drainage class: Somewhat excessively drained
Water table (depth, kind): About 4.0 to 6.0 feet; apparent
Flooding: None
Ponding: None
Permeability: Moderately slow
Available water capacity: Very low
Depth class: Very deep

Component Interpretive Group

Land capability class: 3s

Description of Fuquay

Setting

Landform: Broad interstream divides on marine terraces
Position on the landform: Backslopes, shoulders, summits
Slope: Nearly level
Parent material: Loamy marine deposits and/or sandy marine deposits

Typical Profile

Surface layer:
0 to 9 inches—very dark grayish brown loamy sand

Subsurface layer:
9 to 28 inches—yellowish brown loamy sand

Subsoil:
28 to 38 inches—yellowish brown sandy loam
38 to 44 inches—yellowish brown sandy clay loam that has strong brown mottles
44 to 56 inches—yellowish brown sandy clay loam that has strong brown mottles
56 to 63 inches—pale brown sandy clay loam that has yellowish red, yellowish brown, and gray mottles
63 to 80 inches—light gray, yellowish brown, and yellowish red sandy loam

Component Properties and Qualities

Drainage class: Well drained
Water table (depth, kind): About 4.0 to 6.0 feet; perched
Flooding: None
Ponding: None
Permeability: Moderately slow
Available water capacity: Moderate
Depth class: Very deep

Component Interpretive Group

Land capability class: 2s

Description of Urban land

Urban land consists of areas that have been altered by cutting, filling, and shaping. Schools, parking lots, streets, commercial buildings, and residential dwellings are located in these areas.

CAA—Chastain and Tawcaw soils, 0 to 2 percent slopes, frequently flooded

Map Unit Composition

Chastain and similar soils: About 60 percent
Tawcaw and similar soils: About 30 percent

Minor Components

- Meggett soils, which have a higher base saturation
- Rutlege soils, which have an umbric epipedon and do not have an argillic horizon within 80 inches of the soil surface

Description of Chastain

Setting

Landform: Flood plains
Slope: Nearly level
Parent material: Silty and clayey alluvium

Typical Profile

Surface layer:
0 to 4 inches—dark grayish brown loam

Subsoil:
4 to 25 inches—grayish brown clay that has yellowish red mottles
25 to 36 inches—grayish brown clay that has yellowish red and strong brown mottles

Substratum:
36 to 51 inches—grayish brown sandy clay loam that has strong brown mottles
51 to 58 inches—light brownish gray sandy clay loam that has strong brown mottles
58 to 80 inches—light brownish gray sand that has strong brown mottles

Component Properties and Qualities

Drainage class: Poorly drained
Water table (depth, kind): About 0.0 to 1.0 foot; apparent
Flooding: Frequent
Ponding: None
Permeability: Slow
Available water capacity: Moderate
Depth class: Very deep

Component Interpretive Group

Land capability class: 7w

Description of Tawcaw

Setting

Landform: Flood plains
Slope: Nearly level
Parent material: Silty and clayey alluvium

Typical Profile

Surface layer:
0 to 2 inches—brown silty clay loam

Subsoil:
2 to 18 inches—yellowish brown silty clay loam that has pale brown mottles
18 to 39 inches—strong brown silty clay loam that has red and light brownish gray mottles
39 to 49 inches—strong brown silty clay loam that has red and light brownish gray mottles

Substratum:
49 to 80 inches—yellowish red loamy sand that has pale brown mottles

Component Properties and Qualities

Drainage class: Somewhat poorly drained
Water table (depth, kind): About 1.5 to 2.5 feet; apparent
Flooding: Frequent

Ponding: None
Permeability: Slow
Available water capacity: Moderate
Depth class: Very deep

Component Interpretive Group

Land capability class: 6w

ChA—Chipley sand, 0 to 2 percent slopes

Map Unit Composition

Chipley and similar soils: About 70 percent

Minor Components

- Foxworth soils, which are moderately well drained and somewhat excessively drained and are in slightly higher landscape positions
- Blanton soils, which have a sandy surface layer that ranges from 40 to 80 inches in thickness and are in slightly higher landscape positions
- Ocilla soils, which have a sandy surface layer that ranges from 20 to 40 inches in thickness

Description of Chipley

Setting

Landform: Flats on marine terraces
Slope: Nearly level
Parent material: Sandy marine deposits

Typical Profile

Surface layer:
0 to 8 inches—dark grayish brown sand

Underlying material:
8 to 20 inches—brownish yellow sand
20 to 28 inches—brownish yellow sand that has strong brown and light gray mottles
28 to 35 inches—brownish yellow sand
35 to 59 inches—yellow sand that has strong brown and light gray mottles
59 to 66 inches—light gray sand that has yellowish brown and pale brown mottles
66 to 80 inches—light gray sand that has pale brown, strong brown, and light reddish brown mottles

Component Properties and Qualities

Drainage class: Somewhat poorly drained
Water table (depth, kind): About 2.0 to 3.0 feet; apparent
Flooding: None
Ponding: None
Permeability: Rapid
Available water capacity: Low
Depth class: Very deep

Component Interpretive Group

Land capability class: 3s

CnA—Clarendon loamy sand, 0 to 2 percent slopes

Map Unit Composition

Clarendon and similar soils: About 70 percent

Minor Components

- Dothan soils, which are well drained and are in slightly higher landscape positions
- Leefield soils, which have a sandy surface layer that ranges from 20 to 40 inches in thickness

Description of Clarendon

Setting

Landform: Flats on marine terraces
Slope: Nearly level
Parent material: Loamy marine deposits

Typical Profile

Surface layer:
0 to 6 inches—dark grayish brown loamy sand

Subsurface layer:
6 to 16 inches—light yellowish brown loamy sand

Subsoil:
16 to 21 inches—light yellowish brown sandy clay loam
21 to 26 inches—light yellowish brown sandy clay loam that has yellowish brown, strong brown, and pale brown mottles
26 to 38 inches—brownish yellow sandy clay loam that has strong brown, yellowish brown, light brownish gray, and pale brown mottles
38 to 52 inches—light brownish gray sandy clay loam that has red, yellowish brown, and pale brown mottles
52 to 60 inches—light gray sandy clay loam that has red and yellowish brown mottles
62 to 80 inches—light gray sandy clay loam that has red and yellowish brown mottles

Component Properties and Qualities

Drainage class: Moderately well drained
Water table (depth, kind): About 2.0 to 3.0 feet; apparent
Flooding: None
Ponding: None
Permeability: Slow
Available water capacity: Moderate
Depth class: Very deep

Component Interpretive Group

Land capability class: 2w

DaA—Dasher mucky peat, 0 to 1 percent slopes, ponded

Map Unit Composition

Dasher and similar soils: About 100 percent

Description of Dasher

Setting

Landform: Depressions
Slope: Nearly level
Parent material: Organic material

Typical Profile

Organic material:
0 to 8 inches—black muck
8 to 20 inches—dark reddish brown mucky peat
20 to 40 inches—dark reddish brown mucky peat
40 to 80 inches—dark brown mucky peat

Component Properties and Qualities

Drainage class: Very poorly drained
Water table (depth, kind): About 0.0 feet; apparent
Flooding: None
Ponding: Frequent
Depth of ponding: 0.0 to 3.0 feet
Permeability: Unspecified
Available water capacity: Very high
Depth class: Very deep

Component Interpretive Group

Land capability class: 7w

DcA—Dothan-Clarendon complex, 0 to 2 percent slopes

Map Unit Composition

Dothan and similar soils: About 60 percent
Clarendon and similar soils: About 30 percent

Minor Components

- Fuquay soils, which have a sandy surface layer that ranges from 20 to 40 inches in thickness
- Leefield soils, which are somewhat poorly drained, have a sandy surface layer that ranges from 20 to 40 inches in thickness, and are in slightly lower landscape positions

Description of Dothan

Setting

Landform: Flats on marine terraces
Slope: Nearly level
Parent material: Loamy marine deposits

Typical Profile

Surface layer:
0 to 9 inches—brown loamy sand

Subsurface layer:
9 to 17 inches—yellowish brown loamy sand

Subsoil:
17 to 42 inches—yellowish brown sandy loam
42 to 52 inches—yellowish brown sandy clay loam that has strong brown mottles
52 to 62 inches—yellowish brown sandy clay loam that has yellowish red, strong brown, pale brown, and light brownish gray mottles
62 to 68 inches—light brownish gray, strong brown, and yellowish brown sandy clay loam
68 to 74 inches—red, strong brown, light yellowish brown, and light brownish gray sandy clay loam
74 to 80 inches—light gray, very pale brown, and yellowish brown sandy clay loam

Component Properties and Qualities

Drainage class: Well drained
Water table (depth, kind): About 3.0 to 5.0 feet; apparent
Flooding: None
Ponding: None
Permeability: Slow
Available water capacity: Moderate
Depth class: Very deep

Component Interpretive Group

Land capability class: 1

Description of Clarendon

Setting

Landform: Flats on marine terraces
Slope: Nearly level
Parent material: Loamy marine deposits

Typical Profile

Surface layer:
0 to 6 inches—dark grayish brown loamy sand

Subsurface layer:
6 to 16 inches—light yellowish brown loamy sand

Subsoil:
16 to 21 inches—light yellowish brown sandy clay loam
21 to 26 inches—light yellowish brown sandy clay loam that has yellowish brown, strong brown, and pale brown mottles
26 to 38 inches—brownish yellow sandy clay loam that has strong brown, yellowish brown, light brownish gray, and pale brown mottles
38 to 52 inches—light brownish gray sandy clay loam that has red, yellowish brown, and pale brown mottles
52 to 60 inches—light gray sandy clay loam that has red and yellowish brown mottles
62 to 80 inches—light gray sandy clay loam that has red and yellowish brown mottles

Component Properties and Qualities

Drainage class: Moderately well drained
Water table (depth, kind): About 2.0 to 3.0 feet; apparent
Flooding: None
Ponding: None
Permeability: Slow
Available water capacity: Moderate
Depth class: Very deep

Component Interpretive Group

Land capability class: 2w

EcA—Echaw-Centenary complex, 0 to 2 percent slopes

Map Unit Composition

Echaw and similar soils: About 55 percent
Centenary and similar soils: About 35 percent

Minor Components

- Leon soils, which are somewhat poorly drained and are in slightly lower landscape positions

Description of Echaw

Setting

Landform: Flats on marine terraces
Slope: Nearly level
Parent material: Sandy marine deposits

Typical Profile

Surface layer:
0 to 11 inches—grayish brown sand

Subsurface layer:
11 to 24 inches—light yellowish brown sand
24 to 36 inches—light yellowish brown loamy fine sand that has light gray mottles
36 to 45 inches—light gray sand that has pale brown mottles

Subsoil:
45 to 57 inches—dark brown sand
57 to 80 inches—dark reddish brown sand

Component Properties and Qualities

Drainage class: Moderately well drained
Water table (depth, kind): About 2.5 to 3.5 feet; apparent
Flooding: None
Ponding: None
Permeability: Moderately rapid
Available water capacity: Low
Depth class: Very deep

Component Interpretive Group

Land capability class: 3s

Description of Centenary

Setting

Landform: Flats on marine terraces
Slope: Nearly level
Parent material: Sandy marine deposits

Typical Profile

Surface layer:
0 to 5 inches—very dark grayish brown sand

Subsurface layer:
5 to 28 inches—yellowish brown sand
28 to 47 inches—brownish yellow sand that has yellowish brown mottles
47 to 54 inches—light yellowish brown sand that has yellowish brown and light brownish gray mottles
54 to 62 inches—brown sand that has light brownish gray mottles

Subsoil:
62 to 80 inches—dark reddish brown sand

Component Properties and Qualities

Drainage class: Somewhat excessively drained
Water table (depth, kind): About 3.5 to 5.0 feet; apparent
Flooding: None
Ponding: None
Permeability: Moderately rapid
Available water capacity: Low
Depth class: Very deep

Component Interpretive Group

Land capability class: 3s

EuA—Eulonia sandy loam, 0 to 2 percent slopes

Map Unit Composition

Eulonia and similar soils: About 80 percent

Minor Components

- Ocilla soils, which are somewhat poorly drained and have a sandy surface layer that ranges from 20 to 40 inches in thickness
- Wahee soils, which are somewhat poorly drained and are in slightly lower landscape positions
- Bladen soils, which are poorly drained and are in slightly lower landscape positions

Description of Eulonia

Setting

Landform: Marine terraces and stream terraces
Slope: Nearly level
Parent material: Clayey fluviomarine deposits

Typical Profile

Surface layer:
0 to 8 inches—brown sandy loam

Subsurface layer:
8 to 13 inches—light yellowish brown sandy loam

Subsoil:
13 to 24 inches—red clay that has strong brown mottles
24 to 34 inches—red clay that has yellowish red, strong brown, and light brownish gray mottles
34 to 44 inches—grayish brown sandy clay that has red, yellowish red, and strong brown mottles

44 to 60 inches—grayish brown sandy clay loam that has red, strong brown, and yellowish brown mottles

Substratum:
60 to 80 inches—red, strong brown, yellowish brown, and grayish brown sandy clay loam

Component Properties and Qualities

Drainage class: Moderately well drained
Water table (depth, kind): About 1.5 to 3.5 feet; apparent
Flooding: None
Ponding: None
Permeability: Moderately slow
Available water capacity: Moderate
Depth class: Very deep

Component Interpretive Group

Land capability class: 2w

FoA—Foxworth sand, 0 to 2 percent slopes

Map Unit Composition

Foxworth and similar soils: About 90 percent

Minor Components

- Centennary soils, which are well drained or somewhat excessively drained and have a spodic horizon within 50 to 80 inches of the soil surface
- Blanton soils, which have a sandy surface layer that ranges from 40 to 80 inches in thickness

Description of Foxworth

Setting

Landform: Flats on marine terraces
Slope: Nearly level
Parent material: Sandy marine deposits

Typical Profile

Surface layer:
0 to 8 inches—dark grayish brown sand

Underlying material:
8 to 35 inches—dark yellowish brown sand
35 to 47 inches—yellowish brown sand
47 to 57 inches—yellowish brown sand that has light yellowish brown and strong brown mottles
57 to 69 inches—pale brown sand that has yellowish brown and light gray mottles
69 to 80 inches—light gray with pale brown and yellowish brown mottles

Component Properties and Qualities

Drainage class: Somewhat excessively drained
Water table (depth, kind): About 4.0 to 6.0 feet; apparent
Flooding: None

Ponding: None
Permeability: Rapid
Available water capacity: Low
Depth class: Very deep

Component Interpretive Group

Land capability class: 3s

FuA—Fuquay loamy sand, 0 to 2 percent slopes

Map Unit Composition

Fuquay and similar soils: About 80 percent

Minor Components

- Dothan soils, which have a sandy surface layer less than 20 inches thick
- Leefield soils, which are somewhat poorly drained and are in slightly lower landscape positions
- Foxworth soils, which are moderately well drained and somewhat excessively drained, are sandy to a depth of 80 inches or more, and are in slightly higher landscape positions
- Bonifay soils, which have a sandy surface layer that ranges from 40 to 80 inches in thickness and are in slightly higher landscape positions
- Stilson soils, which are moderately well drained and are in slightly lower landscape positions

Description of Fuquay

Setting

Landform: Broad interstream divides on marine terraces
Position on the landform: Backslopes, shoulders, summits
Slope: Nearly level
Parent material: Loamy marine deposits and/or sandy marine deposits

Typical Profile

Surface layer:
0 to 9 inches—very dark grayish brown loamy sand

Subsurface layer:
9 to 28 inches—yellowish brown loamy sand

Subsoil:
28 to 38 inches—yellowish brown sandy loam
38 to 44 inches—yellowish brown sandy clay loam that has strong brown mottles
44 to 56 inches—yellowish brown sandy clay loam that has strong brown mottles
56 to 63 inches—pale brown sandy clay loam that has yellowish red, yellowish brown, and gray mottles
63 to 80 inches—light gray, yellowish brown, and yellowish red sandy loam

Component Properties and Qualities

Drainage class: Well drained
Water table (depth, kind): About 4.0 to 6.0 feet; perched
Flooding: None
Ponding: None

Permeability: Moderately slow
Available water capacity: Moderate
Depth class: Very deep

Component Interpretive Group

Land capability class: 2s

LeA—Leefield loamy sand, 0 to 2 percent slopes

Map Unit Composition

Leefield and similar soils: About 85 percent

Minor Components

- Stilson soils, which are moderately well drained and are in slightly higher landscape positions
- Albany soils, which have a sandy surface layer that ranges from 40 to 80 inches in thickness
- Pelham soils, which are poorly drained and are in slightly lower landscape positions

Description of Leefield

Setting

Landform: Flats on marine terraces
Slope: Nearly level
Parent material: Loamy marine deposits and/or sandy marine deposits

Typical Profile

Surface layer:
0 to 10 inches—very dark grayish brown loamy sand

Subsurface layer:
10 to 24 inches—light yellowish brown loamy sand that has strong brown and yellowish brown mottles
24 to 29 inches—light yellowish brown loamy sand that has strong brown, yellowish brown, and light gray mottles

Subsoil:
29 to 34 inches—light yellowish brown sandy loam that has strong brown, yellowish brown, and light gray mottles
34 to 41 inches—yellowish brown sandy clay loam that has yellowish red, strong brown, and light brownish gray mottles
41 to 53 inches—light brownish gray sandy clay loam that has red and yellowish brown mottles
53 to 71 inches—red, strong brown, light yellowish brown, and light brownish gray sandy clay loam
71 to 80 inches—red, yellowish red, strong brown, light yellowish brown, and brownish gray sandy clay loam

Component Properties and Qualities

Drainage class: Somewhat poorly drained
Water table (depth, kind): About 1.5 to 2.5 feet; apparent
Flooding: None
Ponding: None

Permeability: Moderately slow
Available water capacity: Moderate
Depth class: Very deep

Component Interpretive Group

Land capability class: 3w

LnA—Leon sand, 0 to 2 percent slopes

Map Unit Composition

Leon and similar soils: About 85 percent

Minor Components

- Ridgeland soils, which are somewhat poorly drained and are in slightly higher landscape positions
- Echaw soils, which are moderately well drained and are in slightly higher landscape positions

Description of Leon

Setting

Landform: Low flats on marine terraces
Slope: Nearly level
Parent material: Sandy marine deposits

Typical Profile

Surface layer:
0 to 8 inches—very dark gray sand

Subsurface layer:
8 to 15 inches—light brownish gray sand

Subsoil:
15 to 18 inches—very dark brown sand
18 to 24 inches—dark reddish brown sand

Subsurface layer:
24 to 33 inches—light brownish gray sand that has very pale brown mottles

Subsoil:
33 to 42 inches—dark brown sand that has pale brown mottles
42 to 80 inches—dark reddish brown sand

Component Properties and Qualities

Drainage class: Poorly drained
Water table (depth, kind): About 0.5 foot to 1.5 feet; apparent
Flooding: None
Ponding: None
Permeability: Moderate
Available water capacity: Low
Depth class: Very deep

Component Interpretive Group

Land capability class: 4w

LvA—Levy silty clay loam, 0 to 1 percent slopes, frequently flooded

Map Unit Composition

Levy and similar soils: About 90 percent

Description of Levy

Setting

Landform: Tidal inlets
Slope: Nearly level
Parent material: Silty and/or clayey alluvium

Typical Profile

Surface layer:
0 to 4 inches—brown silty clay loam that has strong brown, yellowish brown, and gray mottles

Underlying material:
4 to 32 inches—gray silty clay that has strong brown, yellowish brown, and gray mottles
32 to 60 inches—dark bluish gray silty clay that has strong brown, yellowish brown, and gray mottles
60 to 80 inches—dark gray sand that has strong brown, yellowish brown, and gray mottles

Component Properties and Qualities

Drainage class: Very poorly drained
Water table (depth, kind): About 0.0 feet; apparent
Flooding: Very frequent
Ponding: None
Permeability: Slow
Available water capacity: High
Depth class: Very deep

Component Interpretive Group

Land capability class: 7w

MaA—Mascotte sand, 0 to 2 percent slopes

Map Unit Composition

Mascotte and similar soils: About 75 percent

Minor Components

- Rigdon soils, which are somewhat poorly drained and are in slightly higher landscape positions
- Ocilla soils, which are somewhat poorly drained, do not have a spodic horizon, and are in slightly higher landscape positions
- Leon soils, which do not have an argillic horizon within 80 inches of the soil surface

Description of Mascotte

Setting

Landform: Flats on marine terraces
Slope: Nearly level

Parent material: Loamy marine deposits and/or sandy marine deposits

Typical Profile

Surface layer:
0 to 9 inches—black sand

Subsurface layer:
9 to 15 inches—gray sand

Subsoil:
15 to 23 inches—dark reddish brown sand
23 to 26 inches—brown sand
26 to 37 inches—dark reddish brown sand
37 to 57 inches—light brownish gray sandy clay loam
57 to 70 inches—grayish brown sandy loam that has yellowish brown mottles
70 to 80 inches—light gray sandy loam that has light brownish gray mottles

Component Properties and Qualities

Drainage class: Poorly drained
Water table (depth, kind): About 0.5 foot to 1.5 feet; apparent
Flooding: None
Ponding: None
Permeability: Moderately slow
Available water capacity: Moderate
Depth class: Very deep

Component Interpretive Group

Land capability class: 3w

MeA—Meldrim sand, 0 to 2 percent slopes

Map Unit Composition

Meldrim and similar soils: About 70 percent

Minor Components

- Albany soils, which are somewhat poorly drained and are in slightly lower landscape positions
- Blanton soils, which are somewhat excessively drained and are in slightly higher landscape positions
- Bonifay soils which are plinthic, well drained, and in slightly higher landscape positions
- Stilson soils, which are plinthic and have a sandy surface layer that ranges from 20 to 40 inches in thickness

Description of Meldrim

Setting

Landform: Flats on marine terraces
Slope: Nearly level
Parent material: Loamy marine deposits and/or sandy marine deposits

Typical Profile

Surface layer:
0 to 5 inches—dark grayish brown sand

Subsurface layer:
5 to 19 inches—brownish yellow sand
19 to 37 inches—brownish yellow sand that has strong brown and yellowish brown mottles
37 to 50 inches—yellow sand that has yellowish red, strong brown, yellowish brown, and light gray mottles

Subsoil:
50 to 56 inches—light yellowish brown loamy fine sand that has yellowish red, strong brown, yellowish brown, and light gray mottles
56 to 63 inches—light yellowish brown sandy loam that has yellowish red, strong brown, and light gray mottles
63 to 80 inches—light brownish gray sandy clay loam that has yellowish red, strong brown, and light gray mottles

Component Properties and Qualities

Drainage class: Moderately well drained
Water table (depth, kind): About 2.5 to 3.3 feet; apparent
Flooding: None
Ponding: None
Permeability: Slow
Available water capacity: Low
Depth class: Very deep

Component Interpretive Group

Land capability class: 3s

PeA—Pelham loamy sand, 0 to 2 percent slopes

Map Unit Composition

Pelham and similar soils: About 80 percent

Minor Components

- Ocilla soils, which are somewhat poorly drained and are in slightly higher landscape positions

Description of Pelham

Setting

Landform: Drainageways and depressions
Slope: Nearly level
Parent material: Loamy alluvium

Typical Profile

Surface layer:
0 to 6 inches—very dark gray loamy sand

Subsurface layer:
6 to 18 inches—grayish brown loamy sand that has yellowish brown and gray mottles
18 to 33 inches—light brownish gray loamy sand that has brownish yellow mottles

Subsoil:
33 to 41 inches—gray sandy loam that has brownish yellow mottles
41 to 66 inches—gray sandy clay loam that has strong brown, brownish yellow, and gray mottles

66 to 80 inches—light gray sandy loam that has brownish yellow mottles

Component Properties and Qualities

Drainage class: Poorly drained
Water table (depth, kind): About 0.0 to 1.0 foot; apparent
Flooding: None
Ponding: None
Permeability: Moderate
Available water capacity: Moderate
Depth class: Very deep

Component Interpretive Group

Land capability class: 5w

PkA—Pickney mucky sand, 0 to 1 percent slopes, frequently flooded

Map Unit Composition

Pickney and similar soils: About 85 percent

Minor Components

- Leon soils, which are poorly drained and are in slightly lower landscape positions

Description of Pickney

Setting

Landform: Depressions and drainageways
Slope: Nearly level
Parent material: Sandy alluvium

Typical Profile

Surface layer:
0 to 20 inches—black mucky sand
20 to 38 inches—very dark brown loamy fine sand

Underlying material:
38 to 50 inches—grayish brown loamy fine sand
50 to 65 inches—light brownish gray sand
65 to 80 inches—gray sand

Component Properties and Qualities

Drainage class: Very poorly drained
Water table (depth, kind): About 0.0 feet; apparent
Flooding: Frequent
Ponding: Frequent
Depth of ponding: 0.0 to 1.0 foot
Permeability: Rapid
Available water capacity: Low
Depth class: Very deep

Component Interpretive Group

Land capability class: 7w

RaA—Rains loamy sand, 0 to 2 percent slopes

Map Unit Composition

Rains and similar soils: About 80 percent

Minor Components

- Surrency soils, which have an umbric epipedon, are very poorly drained, and have a sandy surface layer that ranges from 20 to 40 inches in thickness

Description of Rains

Setting

Landform: Flats on marine terraces
Slope: Nearly level
Parent material: Loamy marine deposits

Typical Profile

Surface layer:
0 to 6 inches—very dark gray loamy sand

Subsurface layer:
6 to 18 inches—dark gray loamy sand that has gray mottles

Subsoil:
18 to 28 inches—grayish brown sandy clay loam that has yellowish brown mottles
28 to 50 inches—grayish brown sandy clay loam that has yellowish brown mottles
50 to 60 inches—light brownish gray sandy clay loam that has strong brown and yellowish brown mottles
60 to 70 inches—gray sandy clay loam that has strong brown and yellowish brown mottles
70 to 80 inches—gray sandy clay loam that has strong brown, dark yellowish brown, and yellowish brown mottles

Component Properties and Qualities

Drainage class: Poorly drained
Water table (depth, kind): About 0.0 to 1.0 foot; apparent
Flooding: None
Ponding: None
Permeability: Moderate
Available water capacity: High
Depth class: Very deep

Component Interpretive Group

Land capability class: 5w

RbF—Remlik-Blanton complex, 15 to 60 percent slopes

Map Unit Composition

Remlik and similar soils: About 55 percent
Blanton and similar soils: About 20 percent

Minor Components

- Chipley soils, which are somewhat poorly drained, do not have an argillic horizon within 80 inches of the soil surface, and are in slightly lower landscape positions

- Pelham soils, which are poorly drained and are in slightly lower landscape positions
- Osier soils, which are poorly drained and are in slightly lower landscape positions

Description of Remlik

Setting

Landform: Escarpments
Position on the landform: Backslopes
Slope: Moderately steep to very steep
Parent material: Loamy and/or sandy marine deposits

Typical Profile

0 to 8 inches—very dark grayish brown loamy sand
8 to 30 inches—yellowish brown loamy sand
30 to 57 inches—yellowish brown sandy clay loam
57 to 80 inches—yellowish brown sandy loam that has strong brown and light brownish gray mottles

Component Properties and Qualities

Drainage class: Well drained
Flooding: None
Ponding: None
Permeability: Slow
Available water capacity: Low
Depth class: Very deep

Component Interpretive Group

Land capability class: 6e

Description of Blanton

Setting

Landform: Broad interstream divides
Slope: Moderately steep to very steep
Parent material: Loamy marine deposits and/or sandy marine deposits

Typical Profile

0 to 8 inches—brown sand
8 to 42 inches—light olive brown sand
42 to 60 inches—pale yellow sand
60 to 70 inches—pale yellow sand that has strong brown and light brownish gray mottles
70 to 75 inches—strong brown sandy loam
75 to 80 inches—strong brown sandy clay loam

Component Properties and Qualities

Drainage class: Somewhat excessively drained
Water table (depth, kind): About 4.0 to 6.0 feet; apparent
Flooding: None
Ponding: None
Permeability: Moderately slow
Available water capacity: Very low
Depth class: Very deep

Component Interpretive Group

Land capability class: 3s

RdA—Ridgeland-Boulogne complex, 0 to 2 percent slopes

Map Unit Composition

Ridgeland and similar soils: About 65 percent
Boulogne and similar soils: About 20 percent

Minor Components

- Rigdon soils, which have an argillic horizon within 80 inches of the soil surface
- Mascotte soils, which are poorly drained and are in slightly lower landscape positions
- Albany soils, which do not have a spodic horizon and have a sandy surface layer that ranges from 20 to 40 inches in thickness

Description of Ridgeland

Setting

Landform: Flats on marine terraces
Slope: Nearly level
Parent material: Sandy marine deposits

Typical Profile

0 to 6 inches—very dark gray sand
6 to 11 inches—black sand
11 to 25 inches—pale brown sand
25 to 35 inches—light brownish gray sand that has yellowish brown mottles
35 to 43 inches—light brownish gray sand that has faint brown mottles
43 to 54 inches—dark grayish brown sand
54 to 68 inches—black sand
68 to 80 inches—brown sand

Component Properties and Qualities

Drainage class: Somewhat poorly drained
Water table (depth, kind): About 1.5 to 2.5 feet; apparent
Flooding: None
Ponding: None
Permeability: Moderately rapid
Available water capacity: Low
Depth class: Very deep

Component Interpretive Group

Land capability class: 3w

Description of Boulogne

Setting

Landform: Flats on marine terraces
Slope: Nearly level
Parent material: Sandy marine deposits

Typical Profile

Surface layer:
0 to 9 inches—very dark gray sand

Subsurface layer:
9 to 11 inches—dark gray sand

Subsoil:
11 to 16 inches—black sand
16 to 21 inches—brown and very dark grayish brown sand that has dark grayish brown mottles

Subsurface layer:
21 to 39 inches—light brownish gray sand that has strong brown and brownish yellow mottles

Subsoil:
39 to 56 inches—very dark gray loamy sand that has brownish yellow and grayish brown mottles
56 to 74 inches—dark brown loamy sand that has strong brown mottles
74 to 80 inches—dark brown sand

Component Properties and Qualities

Drainage class: Poorly drained
Water table (depth, kind): About 0.5 foot to 1.5 feet; apparent
Flooding: None
Ponding: None
Permeability: Moderately rapid
Available water capacity: Low
Depth class: Very deep

Component Interpretive Group

Land capability class: 3w

RgA—Rigdon sand, 0 to 2 percent slopes

Map Unit Composition

Rigdon and similar soils: About 80 percent

Minor Components

- Mascotte soils, which are poorly drained and are in slightly lower landscape positions
- Leon soils, which are poorly drained, do not have an argillic horizon, and are in slightly lower landscape positions
- Pelham soils, which are poorly drained, do not have a spodic horizon, and are in slightly lower landscape positions

Description of Rigdon

Setting

Landform: Flats on marine terraces
Slope: Nearly level
Parent material: Loamy marine deposits

Typical Profile

Surface layer:
0 to 6 inches—black sand

Subsoil:
6 to 11 inches—dark brown sand

Subsurface layer:
11 to 20 inches—pale brown sand that has brownish yellow mottles

20 to 36 inches—pale brown sand that has brownish yellow and faint light gray mottles

Subsoil:
36 to 49 inches—light brownish gray sandy clay loam that has red and yellowish brown mottles
49 to 80 inches—light gray sandy clay loam that has dark red, strong brown, and yellowish brown mottles

Component Properties and Qualities

Drainage class: Somewhat poorly drained
Water table (depth, kind): About 1.5 to 2.5 feet; apparent
Flooding: None
Ponding: None
Permeability: Moderate
Available water capacity: Low
Depth class: Very deep

Component Interpretive Group

Land capability class: 3w

RmA—Rigdon-Mascotte-Urban land complex, 0 to 2 percent slopes

Map Unit Composition

Rigdon and similar soils: About 40 percent
Mascotte and similar soils: About 30 percent
Urban land: About 25 percent

Description of Rigdon

Setting

Landform: Flats on marine terraces
Slope: Nearly level
Parent material: Loamy marine deposits

Typical Profile

Surface layer:
0 to 6 inches—black sand

Subsoil:
6 to 11 inches—dark brown sand

Subsurface layer:
11 to 20 inches—pale brown sand that has brownish yellow mottles
20 to 36 inches—pale brown sand that has brownish yellow and faint light gray mottles

Subsoil:
36 to 49 inches—light brownish gray sandy clay loam that has red and yellowish brown mottles
49 to 80 inches—light gray sandy clay loam that has dark red, strong brown, and yellowish brown mottles

Component Properties and Qualities

Drainage class: Somewhat poorly drained
Water table (depth, kind): About 1.5 to 2.5 feet; apparent

Flooding: None
Ponding: None
Permeability: Moderate
Available water capacity: Low
Depth class: Very deep

Component Interpretive Group

Land capability class: 3w

Description of Mascotte

Setting

Landform: Flats on marine terraces
Slope: Nearly level
Parent material: Loamy marine deposits and/or sandy marine deposits

Typical Profile

Surface layer:
0 to 9 inches—black sand

Subsurface layer:
9 to 15 inches—gray sand

Subsoil:
15 to 23 inches—dark reddish brown sand
23 to 26 inches—brown sand
26 to 37 inches—dark reddish brown sand
37 to 57 inches—light brownish gray sandy clay loam
57 to 70 inches—grayish brown sandy loam that has yellowish brown mottles
70 to 80 inches—light gray sandy loam that has light brownish gray mottles

Component Properties and Qualities

Drainage class: Poorly drained
Water table (depth, kind): About 0.5 foot to 1.5 feet; apparent
Flooding: None
Ponding: None
Permeability: Moderately slow
Available water capacity: Moderate
Depth class: Very deep

Component Interpretive Group

Land capability class: 3w

Description of Urban land

Urban land consists of areas that have been altered by cutting, filling, and shaping. Schools, parking lots, streets, commercial buildings, and residential dwellings are located in these areas.

StA—Stilson loamy sand, 0 to 2 percent slopes

Map Unit Composition

Stilson and similar soils: About 85 percent

Minor Components

- Leefield soils, which are somewhat poorly drained and are in slightly lower landscape positions
- Ocilla soils, which are somewhat poorly drained and are in slightly lower landscape positions
- Rigdon soils, which are somewhat poorly drained, have a spodic horizon, and are in slightly lower landscape positions
- Clarendon soils, which are moderately well drained and have a sandy surface layer that ranges from 10 to 20 inches thick

Description of Stilson

Setting

Landform: Flats on marine terraces
Slope: Nearly level
Parent material: Loamy marine deposits and/or sandy marine deposits

Typical Profile

Surface layer:
0 to 6 inches—dark grayish brown loamy sand

Subsurface layer:
6 to 16 inches—light yellowish brown loamy sand
16 to 21 inches—light yellowish brown sandy clay loam
21 to 26 inches—light yellowish brown sandy clay loam that has yellowish brown, strong brown, and pale brown mottles

Subsoil:
26 to 38 inches—brownish yellow sandy clay loam that has strong brown, yellowish brown, light brownish gray, and pale brown mottles
38 to 52 inches—light brownish gray sandy clay loam that has red, yellowish brown, and pale brown mottles
52 to 60 inches—light gray sandy clay loam that has red and yellowish brown mottles
62 to 80 inches—light gray sandy clay loam that has red and yellowish brown mottles

Component Properties and Qualities

Drainage class: Moderately well drained
Water table (depth, kind): About 2.5 to 3.5 feet; apparent
Flooding: None
Ponding: None
Permeability: Moderately slow
Available water capacity: Moderate
Depth class: Very deep

Component Interpretive Group

Land capability class: 2w

SuA—Surrency mucky sand, 0 to 1 percent slopes, frequently flooded

Map Unit Composition

Surrency and similar soils: About 85 percent

Minor Components

- Rutlege soils, which do not have an argillic horizon
- Pelham soils, which are poorly drained, do not have an umbric epipedon, and are in slightly higher landscape positions

Description of Surrency

Setting

Landform: Depressions and drainageways
Slope: Nearly level
Parent material: Loamy marine deposits over sandy marine deposits

Typical Profile

Surface layer:
0 to 22 inches—black mucky sand

Subsoil:
22 to 35 inches—dark gray sandy loam
35 to 58 inches—dark gray sandy clay loam that has yellowish brown mottles
58 to 80 inches—dark gray sandy clay loam that has strong brown and yellowish brown mottles

Component Properties and Qualities

Drainage class: Very poorly drained
Water table (depth, kind): About 0.0 feet; apparent
Flooding: Frequent
Ponding: Frequent
Depth of ponding: 0.0 to 1.0 foot
Permeability: Moderately slow
Available water capacity: Moderate
Depth class: Very deep

Component Interpretive Group

Land capability class: 6w

Ud—Udorthents, loamy

Map Unit Composition

Udorthents and similar soils: About 100 percent

Description of Udorthents

Udorthents are areas that have been disturbed by cutting, filling, or reshaping. Soil properties, such as texture, depth, permeability, and available water capacity, are highly variable.

W—Water

Map Unit Composition

Water: About 100 percent

Description of Water

This component consists of areas of open water, such as lakes, ponds, rivers, and streams.

Use and Management of the Soils

This soil survey is an inventory and evaluation of the soils in the survey area. It can be used to adjust land uses to the limitations and potentials of natural resources and the environment. Also, it can help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, engineers, and others collect extensive field data about the nature and behavioral characteristics of the soils. They collect data on erosion, droughtiness, flooding, and other factors that affect various soil uses and management. Field experience and collected data on soil properties and performance are used as a basis in predicting soil behavior.

Information in this section can be used to plan the use and management of soils for crops and pasture; as forestland; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreational facilities; for agricultural waste management; and as wildlife habitat. It can be used to identify the potentials and limitations of each soil for specific land uses and to help prevent construction failures caused by unfavorable soil properties.

Planners and others using soil survey information can evaluate the effect of specific land uses on productivity and on the environment in all or part of the survey area. The survey can help planners to maintain or create a land use pattern in harmony with the natural soil.

Contractors can use this survey to locate sources of gravel, sand, reclamation material, roadfill, and topsoil. They can use it to identify areas where wetness, or very firm soil layers can cause difficulty in excavation.

Health officials, highway officials, engineers, and others may also find this survey useful. The survey can help them plan the safe disposal of wastes and locate sites for pavements, sidewalks, campgrounds, playgrounds, lawns, and trees and shrubs.

Interpretive Ratings

The interpretive tables in this survey rate the soils in the survey area for various uses. Many of the tables identify the limitations that affect specified uses and indicate the severity of those limitations. The ratings in these tables are both verbal and numerical.

Rating Class Terms

Rating classes are expressed in the tables in terms that indicate the extent to which the soils are limited by all of the soil features that affect a specified use or in terms that indicate the suitability of the soils for the use. Thus, the tables may show limitation classes or suitability classes. Terms for the limitation classes are *not limited, somewhat limited,* and *very limited*. The suitability ratings are expressed as *well suited, moderately suited, poorly suited,* and *unsuited* or as *good, fair,* and *poor*.

Numerical Ratings

Numerical ratings in the tables indicate the relative severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate

gradations between the point at which a soil feature has the greatest negative impact on the use and the point at which the soil feature is not a limitation. The limitations appear in order from the most limiting to the least limiting. Thus, if more than one limitation is identified, the most severe limitation is listed first and the least severe one is listed last.

Crops and Pasture

General management needed for crops and pasture is suggested in this section. The estimated yields of the main crops and pasture plants are listed, and the system of land capability classification used by the Natural Resources Conservation Service is explained.

Planners of management systems for individual fields or farms should consider the detailed information given in the description of each soil under the heading “Detailed Soil Map Units.” Specific information can be obtained from the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

Yields per Acre

The average yields per acre shown in table 5 are those that can be expected of the principal crops under a high level of management. In any given year, yields may be higher or lower than those indicated in the table because of variations in rainfall and other climatic factors. The land capability classification of map units in the survey area also is shown in the table.

The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations also are considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, barnyard manure, and green manure crops; and harvesting that ensures the smallest possible loss.

Pasture yields are expressed in terms of animal unit months. An animal unit month (AUM) is the amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change.

Crops other than those shown in table 5 are grown in the survey area, but estimated yields are not listed because the acreage of such crops is small. The local office of the Natural Resources Conservation Service or of the Cooperative Extension Service can provide information about the management and productivity of the soils for those crops.

Land Capability Classification

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used

in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for rangeland, for forestland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels—capability class, subclass, and unit *(17)*.

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have slight limitations that restrict their use.

Class 2 soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, *e, w, s,* or *c,* to the class numeral, for example, 2e. The letter *e* shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; *w* shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); *s* shows that the soil is limited mainly because it is shallow, droughty, or stony; and *c,* used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w, s,* or *c* because the soils in class 5 are subject to little or no erosion. They have other limitations that restrict their use to pasture, rangeland, forestland, wildlife habitat, or recreation.

Capability units are soil groups within a subclass. The soils in a capability unit are enough alike to be suited to the same crops and pasture plants, to require similar management, and to have similar productivity. Capability units are generally designated by adding an Arabic numeral to the subclass symbol, for example, 2e-4 and 3e-6. These units are not given in all soil surveys.

The capability classification of the soils in this survey area is given in the section “Detailed Soil Map Units” and in the yields tables.

Prime Farmland and Other Important Farmlands

Table 6 lists the map units in the survey area that are considered prime farmland, unique farmland, and farmland of statewide or local importance. This list does not constitute a recommendation for a particular land use.

In an effort to identify the extent and location of important farmlands, the Natural Resources Conservation Service, in cooperation with other interested Federal, State, and local government organizations, has inventoried land that can be used for the production of the Nation's food supply.

Prime farmland is of major importance in meeting the Nation's short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil quality, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. The water supply is dependable and of adequate quality. Prime farmland is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

A recent trend in land use in some areas has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

For some soils identified in the table as prime farmland, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are needed. Onsite evaluation is needed to determine whether or not the hazard or limitation has been overcome by corrective measures.

Unique farmland is land other than prime farmland that is used for the production of specific high-value food and fiber crops, such as citrus, tree nuts, olives, cranberries, and other fruits and vegetables. It has the special combination of soil quality, growing season, moisture supply, temperature, humidity, air drainage, elevation, and aspect needed for the soil to economically produce sustainable high yields of these crops when properly managed. The water supply is dependable and of adequate quality. Nearness to markets is an additional consideration. Unique farmland is not based on national criteria. It commonly is in areas where there is a special microclimate, such as the wine country in California.

In some areas, land that does not meet the criteria for prime or unique farmland is considered to be *farmland of statewide importance* for the production of food, feed, fiber, forage, and oilseed crops. The criteria for defining and delineating farmland of statewide importance are determined by the appropriate State agencies. Generally, this land includes areas of soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some areas may produce as high a yield as prime farmland if conditions are favorable. Farmland of statewide importance may include tracts of land that have been designated for agriculture by State law.

In some areas that are not identified as having national or statewide importance, land is considered to be *farmland of local importance* for the production of food, feed, fiber, forage, and oilseed crops. This farmland is identified by the appropriate local

agencies. Farmland of local importance may include tracts of land that have been designated for agriculture by local ordinance.

Hydric Soils

This section lists the map units that are rated as hydric soils in the survey area. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site *(8, 10)*.

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology *(4, 10, 12, 13)*. Criteria for all of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part *(5)*. These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established *(6)*. These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" *(15)* and "Keys to Soil Taxonomy" *(16)* and in the "Soil Survey Manual" *(18)*.

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" *(8)*.

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Map units that are dominantly made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units dominantly made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

The following map units meet the definition of hydric soils and, in addition, have at least one of the hydric soil indicators. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site *(8, 10)*.

BdA Bladen fine sandy loam, 0 to 2 percent slopes
CAA Chastain and Tawcaw soils, 0 to 2 percent slopes, frequently flooded
DaA Dasher mucky peat, 0 to 1 percent slopes, ponded
LvA Levy silty clay loam, 0 to 1 percent slopes, frequently flooded

PeA Pelham loamy sand, 0 to 2 percent slopes
PkA Pickney mucky sand, 0 to 1 percent slopes, frequently flooded
RaA Rains loamy sand, 0 to 2 percent slopes
SuA Surrency mucky sand, 0 to 1 percent slopes, frequently flooded

The following map units, in general, do not meet the definition of hydric soils because they do not have one of the hydric soil indicators. A portion of these map units, however, may include hydric soils. Onsite investigation is recommended to determine whether hydric soils occur and the location of the included hydric soils.

CnA Clarendon loamy sand, 0 to 2 percent slopes
EuA Eulonia sandy loam, 0 to 2 percent slopes
LeA Leefield loamy sand, 0 to 2 percent slopes
LnA Leon sand, 0 to 2 percent slopes
MaA Mascotte, 0 to 2 percent slopes

Forestland Management and Productivity

Josh A. Wheat, State Resource Conservationist, Natural Resources Conservation Service, prepared this section.

Of the more than 306,900 acres in Effingham County, almost 77 percent, or 235,000 acres, is in forest. About 183,000 acres, or 78 percent of the forestland, is privately owned, and the remainder is owned by the forest industry and local governments *(14)*. Among the most significant forest types in the county are mixed hardwood/pine (111,800 acres), loblolly pine (80,700 acres), and longleaf/slash (36,200 acres) *(14)*.

Virgin forest once covered most of the county. As settlement progressed, the upland, well drained soils were cleared for cultivation. The soils in the remaining forestland consist of those on flood plains and in depressions and the deep, excessively drained soils on ridges and uplands. Farming peaked in the early 1900?s, and the trend during the next several decades was away from cultivation and back toward forest and pasture management. Since the early 1960?s, the rural farm population has decreased significantly and the urban and non-farm rural population has increased.

Over 60 percent of the forestland in Effingham County is considered fully or moderately stocked, with the remainder being poorly stocked *(14)*. Only about 26 percent of the forestland is considered moderately productive, capable of producing, under average management, about 1 to 1.5 cords per acre per year *(14)*. (One cord of standing timber contains approximately 70 to 90 cubic feet of wood volume.) The remaining acreage normally produces less than a cord per acre. Production on much of the existing forestland could be improved by thinning out mature trees and undesirable species. Protection from excessive grazing and control of fire, disease, and insects also can improve the stands. The Natural Resources Conservation Service, the Georgia Forestry Commission, or the Cooperative Extension Service can help to determine specific forestland management needs.

The tables described in this section can help forest owners or managers plan the use of soils for wood crops. They show the potential productivity of the soils for wood crops and rate the soils according to the limitations that affect various aspects of forestland management.

Forestland Productivity

In table 7, ratings in the column *potential for seedling mortality* are based on flooding, ponding, depth to a water table, content of lime, reaction, salinity, available

water capacity, soil moisture regime, soil temperature regime, aspect, and slope. The soils are described as having a low, moderate, or high potential for seedling mortality.

The *potential productivity* of merchantable or *common trees* on a soil is expressed as a site index and as a volume number. The *site index* is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of years. The site index applies to fully stocked, even-aged, unmanaged stands. Commonly grown trees are those that forest managers generally favor in intermediate or improvement cuttings. They are selected on the basis of growth rate, quality, value, and marketability. More detailed information regarding site index is available in the "National Forestry Manual," which is available at the local office of the Natural Resources Conservation Service or on the Internet.

The *volume of wood fiber*, a number, is the yield likely to be produced by the most important tree species. This number, expressed as cubic feet per acre per year and calculated at the age of culmination of the mean annual increment (CMAI), indicates the amount of fiber produced in a fully stocked, even-aged, unmanaged stand.

Trees to manage are those that are preferred for planting, seeding, or natural regeneration and those that remain in the stand after thinning or partial harvest.

Forestland Management

In table 8, parts I and II, interpretive ratings are given for various aspects of forestland management. The ratings are both verbal and numerical.

Some rating class terms indicate the degree to which the soils are suited to a specified aspect of forestland management. *Well suited* indicates that the soil has features that are favorable for the specified management aspect and has no limitations. Good performance can be expected, and little or no maintenance is needed. *Moderately suited* indicates that the soil has features that are moderately favorable for the specified management aspect. One or more soil properties are less than desirable, and fair performance can be expected. Some maintenance is needed. *Poorly suited* indicates that the soil has one or more properties that are unfavorable for the specified management aspect. Overcoming the unfavorable properties requires special design, extra maintenance, and costly alteration. *Unsuited* indicates that the expected performance of the soil is unacceptable for the specified management aspect or that extreme measures are needed to overcome the undesirable soil properties.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the specified aspect of forestland management (1.00) and the point at which the soil feature is not a limitation (0.00).

The paragraphs that follow indicate the soil properties considered in rating the soils. More detailed information about the criteria used in the ratings is available in the "National Forestry Manual," which is available at the local office of the Natural Resources Conservation Service or on the Internet.

The ratings of *suitability for log landings* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, ponding, flooding, and the hazard of soil slippage. The soils are described as well suited, moderately suited, or poorly suited to use as log landings.

Ratings in the column *hazard of erosion on roads and trails* are based on the soil erodibility factor K, slope, and content of rock fragments. The ratings apply to unsurfaced roads and trails. The hazard is described as slight, moderate, or severe. A rating of *slight* indicates that little or no erosion is likely; *moderate* indicates that some erosion is likely, that the roads or trails may require occasional maintenance, and that simple erosion-control measures are needed; and *severe* indicates that significant

erosion is expected, that the roads or trails require frequent maintenance, and that costly erosion-control measures are needed.

Ratings in the column *suitability for roads (natural surface)* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, ponding, flooding, and the hazard of soil slippage. The ratings indicate the suitability for using the natural surface of the soil for roads. The soils are described as well suited, moderately suited, or poorly suited to this use.

Ratings in the columns *suitability for hand planting* and *suitability for mechanical planting* are based on slope, depth to a restrictive layer, content of sand, plasticity index, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, moderately suited, poorly suited, or unsuited to these methods of planting. It is assumed that necessary site preparation is completed before seedlings are planted.

Ratings in the column *suitability for use of harvesting equipment* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, and ponding. The soils are described as well suited, moderately suited, or poorly suited to this use.

Recreational Development

In table 9, parts I and II, the soils of the survey area are rated according to limitations that affect their suitability for recreational development. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the recreational uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The ratings in the table are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality, vegetation, access to water, potential water impoundment sites, and access to public sewer lines. The capacity of the soil to absorb septic tank effluent and the ability of the soil to support vegetation also are important. Soils that are subject to flooding are limited for recreational uses by the duration and intensity of flooding and the season when flooding occurs. In planning recreational facilities, onsite assessment of the height, duration, intensity, and frequency of flooding is essential.

The information in this table can be supplemented by other information in this survey, for example, interpretations for dwellings without basements, for local roads and streets, and for septic tank absorption fields.

Camp areas require site preparation, such as shaping and leveling the tent and parking areas, stabilizing roads and intensively used areas, and installing sanitary facilities and utility lines. Camp areas are subject to heavy foot traffic and some

vehicular traffic. The ratings are based on the soil properties that affect the ease of developing camp areas and the performance of the areas after development. Slope, stoniness, and depth to bedrock or a cemented pan are the main concerns affecting the development of camp areas. The soil properties that affect the performance of the areas after development are those that influence trafficability and promote the growth of vegetation, especially in heavily used areas. For good trafficability, the surface of camp areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Picnic areas are subject to heavy foot traffic. Most vehicular traffic is confined to access roads and parking areas. The ratings are based on the soil properties that affect the ease of developing picnic areas and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of picnic areas. For good trafficability, the surface of picnic areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Playgrounds require soils that are nearly level, are free of stones, and can withstand intensive foot traffic. The ratings are based on the soil properties that affect the ease of developing playgrounds and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of playgrounds. For good trafficability, the surface of the playgrounds should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Paths and trails for hiking and horseback riding should require little or no slope modification through cutting and filling. The ratings are based on the soil properties that affect trafficability and erodibility. These properties are stoniness, depth to a water table, ponding, flooding, slope, and texture of the surface layer.

Wildlife Habitat

Wildlife is an important natural resource in Effingham County. White-tailed deer, squirrel, wild turkey, rabbit, raccoon, and gray fox are common in most parts of the county. Bobwhite quail, numerous small mammals, and many types of songbirds inhabit farmed areas where early successional habitat is readily available. Streams, ponds, and lakes support excellent populations of largemouth bass, catfish, chain pickerel, warmouth perch, bluegill bream, and American alligators. Wetlands provide resting and feeding areas for migratory waterfowl in fall and spring as well as breeding habitat for frogs and amphibians.

Wildlife populations are the product of available habitat. This habitat must furnish an animal species with food, cover, water, and space in order for the species to maintain a viable population.

Soils affect the kind and amount of vegetation that is available to wildlife as food and cover. The kind and abundance of wildlife depend largely on the amount and distribution of food, cover, and water. Wildlife habitat can be created or improved by planting appropriate vegetation, by maintaining or manipulating the existing plant cover, or by promoting the natural establishment of desirable plants.

In table 10, the soils in the survey area are rated according to their potential for providing habitat for various kinds of wildlife. Existing habitat is disregarded. This information can be used in improving wildlife habitat with individual landowners, planning parks, wildlife refuges, nature study areas, and other developments for wildlife; in selecting soils that are suitable for establishing, improving, or maintaining specific elements of wildlife habitat; and in determining the intensity of management needed for each element of the habitat.

The potential of the soil is rated good, fair, poor, or very poor. A rating of *good* indicates that the element or kind of habitat is easily established, improved, or maintained. Few or no limitations affect management, and satisfactory results a can be expected. A rating of *fair* indicates that the element or kind of habitat can be established, improved, or maintained in most places. Moderately intensive management is required for satisfactory results. A rating of *poor* indicates that limitations are severe for the designated element or kind of habitat. Habitat can be created, improved, or maintained in most places, but management is difficult and must be intensive. A rating of *very poor* indicates that restrictions for the element or kind of habitat are very severe and that unsatisfactory results can be expected. Creating, improving, or maintaining habitat on sites rated very poor is impractical or impossible.

Food resources important to wildlife and the soil properties that affect the suitability of a soil for their production are described in the following paragraphs:

Grain and seed crops are domestic grains and seed-producing herbaceous plants. Soils properties and features that affect the growth of grain and seed crops are depth of the root zone, texture of the surface layer, available water capacity, wetness, slope, surface stoniness, and flooding. Soil temperature and soil moisture are also considerations. The best results in growing grain and seed crops for wildlife are obtained when growing on the best soils for growing agricultural crops. Examples of grain and seed crops are corn, wheat, and rye.

Examples of *domestic grasses and legumes* are bermudagrass, bahiagrass, clover, lespedeza, and alfalfa. Soil properties and features that affect the growth of grasses and legumes are depth of root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, flooding, and slope. Soil temperature and soil moisture are also considerations. Most domestic grasses such as bermudagrass and bahiagrass can be rated as providing poor wildlife habitat due to their growth characteristics.

Wild herbaceous plants are native or naturally established grasses and forbs, including weeds. Soil properties and features that affect the growth of these plants are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, and flooding. Soil temperature and soil moisture area also considerations. Examples of wild herbaceous plants are big and little bluestem, goldenrod, beggar weed, ragweed, lespedeza, indiangrass, and partridge pea. Native plants provide the best combination of food and cover for wildlife and usually are the easiest to get started and maintain in providing wildlife habitat.

Hardwood trees and woody understory plants produce nuts or other fruit, buds, catkins, twigs, bark, and foliage. Soil properties and features that affect the growth of hardwood trees and shrubs are depth of the root zone, available water capacity, and wetness. Examples of these plants are oak, hickory, black cherry, crabapple, hawthorn, dogwood, blackberry, and blueberry. Examples of fruit producing shrubs that are suitable for planting on soils rated good are plum, persimmon, and crabapple.

Coniferous plants furnish cover, nesting sites, browse and seeds. Soil properties and features that affect the growth of coniferous trees, shrubs, and ground cover are depth of the root zone, available water capacity, and wetness. Examples of coniferous plants are pine, cypress, and red cedar.

Shrubs are bushy woody plants that produce fruit, buds, twigs, bark, and foliage that wildlife species use as food. Soil properties and features that affect the growth of shrubs are depth of the root zone, available water capacity, salinity, and soil moisture. Examples of shrubs are American beautyberry, gallberry (inkberry), strawberry bush, bicolor lespedesa, blueberries, and sparkleberry.

Wetland plants are annual and perennial wild herbaceous plants that grow on moist or wet sites. Submerged or floating aquatic plants are excluded. Soil properties and features affecting wetland plants are texture of the surface layer, wetness, reaction, salinity, slope, and surface stoniness. Examples of wetland plants are elderberry, smartweed, wild millet, wild rice, cord grass, rushes, sedges, and reeds.

The habitat for various kinds of wildlife is described in the following paragraphs:

Habitat for openland wildlife consists of cropland, pasture, meadows, and areas that are overgrown with grasses, herbs, shrubs, and vines in what is known as early successional habitat. These areas produce grain and seed crops, grasses and legumes, and wild herbaceous plants. Wildlife attracted to these areas includes bobwhite quail, meadowlark, field sparrow, cottontail rabbit, and gray fox.

Habitat for woodland wildlife consists of areas of deciduous plants or coniferous plants or both and associated understory vegetation such as grasses, legumes, and wild herbaceous plants. Wildlife attracted to these areas includes wild turkey, many types of songbirds, woodcocks, thrushes, woodpeckers, squirrels, raccoon, and deer.

Habitat for wetland wildlife consists of open, marshy or swampy shallow water areas. Some of the wildlife attracted to such areas are amphibians, ducks, geese, herons, shore birds, and beavers. Shallow water areas have an average depth of less than 5 feet. Some are naturally wet areas. Others are created by dams, levees, or other water-control structures. Soil properties and features affecting shallow water areas are depth to bedrock, wetness, surface stoniness, slope, and permeability. Examples of shallow water areas are marshes, waterfowl feeding areas, and ponds.

Engineering

This section provides information for planning land uses related to urban development and to water management. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, sanitary facilities, construction materials, and water management. The ratings are based on observed performance of the soils and on the data in the tables described under the heading “Soil Properties.”

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this section. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about particle-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 to 7 feet of the surface, soil wetness, depth to a water table, ponding, slope, likelihood of flooding, natural soil

structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kinds of adsorbed cations. Estimates were made for erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for sanitary landfills, septic tank absorption fields, and sewage lagoons; plan detailed onsite investigations of soils and geology; locate potential sources of gravel, sand, reclamation material, roadfill, and topsoil; plan structures for water management; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

The information in the tables, along with the soil maps, the soil descriptions, and other data provided in this survey, can be used to make additional interpretations.

Some of the terms used in this soil survey have a special meaning in soil science and are defined in the Glossary.

Building Site Development

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Table 10, parts I and II, show the degree and kind of soil limitations that affect dwellings with and without basements, small commercial buildings, local roads and streets, and shallow excavations.

The ratings in the table are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet. The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding,

slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a water table, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

Sanitary Facilities

Table 11 shows the degree and kind of soil limitations that affect septic tank absorption fields and sewage lagoons. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 60 inches is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Permeability, depth to a water table, ponding, depth to bedrock or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, permeability, depth to a water table, ponding, depth to bedrock or a cemented pan, flooding, large stones, and content of organic matter.

Soil permeability is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that have a permeability rate of more than 2 inches per hour are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground-water contamination is also a hazard if fractured bedrock is within a depth of 40 inches, if the water table is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.

A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.

Construction Materials

Table 12 gives information about the soils as potential sources of sand, roadfill, and topsoil. Normal compaction, minor processing, and other standard construction practices are assumed.

Sand is a natural aggregates suitable for commercial use with a minimum of processing. It is used in many kinds of construction. Specifications for each use vary widely. In the table, only the likelihood of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material. The properties used to evaluate the soil as a source of sand are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the bottom layer of the soil contains sand, the soil is considered a likely source regardless of thickness. The assumption is that the sand layer below the depth of observation exceeds the minimum thickness.

The soils are rated *good, fair,* or *poor* as potential sources of sand. A rating of *good* or *fair* means that the source material is likely to be in or below the soil. The bottom layer and the thickest layer of the soils are assigned numerical ratings. These ratings indicate the likelihood that the layer is a source of sand. The number 0.00 indicates that the layer is a poor source. The number 1.00 indicates that the layer is a good source. A number between 0.00 and 1.00 indicates the degree to which the layer is a likely source.

The rating class terms are *good, fair,* and *poor* for sources of roadfill and topsoil. The features that limit the soils as sources of these materials are specified in the table. The numerical ratings given after the specified features indicate the degree to which the features limit the soils as sources of roadfill and topsoil. The lower the number, the greater the limitation.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet high and less exacting in design than higher embankments.

The ratings are for the whole soil, from the surface to a depth of about 5 feet. It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties that affect the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. The ease of excavation is affected by large stones, depth to a water table, and slope. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrink-swell potential).

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the material; and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. The ease of excavating, loading, and spreading is affected by rock fragments, slope, depth to a water table, soil texture, and thickness of suitable material. Reclamation of the borrow area is affected by slope, depth to a water table, rock fragments, depth to bedrock or a cemented pan, and toxic material.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

Water Management

Table 13 gives information on the soil properties and site features that affect water management. The degree and kind of soil limitations are given for pond reservoir areas and for embankments, dikes, and levees. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Pond reservoir areas hold water behind a dam or embankment. Soils best suited to this use have low seepage potential in the upper 60 inches. The seepage potential is determined by the permeability of the soil and the depth to fractured bedrock or other permeable material. Excessive slope can affect the storage capacity of the reservoir area.

Embankments, dikes, and levees are raised structures of soil material, generally less than 20 feet high, constructed to impound water or to protect land against overflow. Embankments that have zoned construction (core and shell) are not considered. In this table, the soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of about 5

feet. It is assumed that soil layers will be uniformly mixed and compacted during construction.

The ratings do not indicate the ability of the natural soil to support an embankment. Soil properties to a depth even greater than the height of the embankment can affect performance and safety of the embankment. Generally, deeper onsite investigation is needed to determine these properties.

Soil material in embankments must be resistant to seepage, piping, and erosion and have favorable compaction characteristics. Unfavorable features include less than 5 feet of suitable material and a high content of stones or boulders, organic matter, or salts or sodium. A high water table affects the amount of usable material. It also affects trafficability.

Soil Properties

Data relating to soil properties are collected during the course of the soil survey.

Soil properties are determined by field examination of the soils and by laboratory index testing of some benchmark soils. Established standard procedures are followed. During the survey, many shallow borings are made and examined to identify and classify the soils and to delineate them on the soil maps. Samples are taken from some typical profiles and tested in the laboratory to determine particle-size distribution, plasticity, and compaction characteristics.

Estimates of soil properties are based on field examinations, on laboratory tests of samples from the survey area, and on laboratory tests of samples of similar soils in nearby areas. Tests verify field observations, verify properties that cannot be estimated accurately by field observation, and help to characterize key soils.

The estimates of soil properties are shown in tables. They include engineering properties, physical and chemical properties, and pertinent soil and water features.

Engineering Properties

Table 14 gives the engineering classifications and the range of engineering properties for the layers of each soil in the survey area.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. “Loam,” for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, “gravelly.” Textural terms are defined in the Glossary.

Classification of the soils is determined according to the Unified soil classification system *(2)* and the system adopted by the American Association of State Highway and Transportation Officials *(1)*.

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group

index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest.

Rock fragments larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an ovendry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Liquid limit and *plasticity index* (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

Physical and Chemical Properties of the Soils

Table 15 shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In the table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, permeability, plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at $^1/_3$- or $^1/_{10}$-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute linear extensibility, shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Permeability (K_{sat}) refers to the ability of a soil to transmit water or air. The term "permeability," as used in soil surveys, indicates saturated hydraulic conductivity (K_{sat}). The estimates in the table indicate the rate of water movement, in inches per hour, when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Permeability is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an

important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. Volume change is influenced by the amount and type of clay minerals in the soil.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Soil reaction is a measure of acidity or alkalinity. The pH of each soil horizon is based on many field tests. For many soils, values have been verified by laboratory analyses. Soil reaction is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In the table, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in the table as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and permeability. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Water Features

Table 16 gives estimates of various water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

The *months* in the table indicate the portion of the year in which the feature is most likely to be a concern.

Water table refers to a saturated zone in the soil. The table indicates, by month, depth to the top *(upper limit)* of the saturated zone in most years. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors or mottles (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

Also indicated in the table is the *kind of water table*. An *apparent* water table is a thick zone of free water in the soil. It is indicated by the level at which water stands in an uncased borehole after adequate time is allowed for adjustment in the surrounding soil. A *perched* water table is water standing above an unsaturated zone. In places, an upper, or perched, water table is separated from a lower one by a dry zone.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. The table indicates *surface water depth* and the *duration* and *frequency* of ponding. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. *None* means that ponding is not probable; *rare* that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); *occasional* that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and *frequent* that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and *frequency* are estimated. Duration is expressed as *extremely brief* if 0.1 hour to 4 hours, *very brief* if 4 hours to 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent. *None* means that flooding is not probable; *very rare* that it is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year); *rare* that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); *occasional* that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); *frequent* that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year but is less than 50 percent in all months

in any year); and *very frequent* that it is likely to occur very often under normal weather conditions (the chance of flooding is more than 50 percent in all months of any year).

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered are local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

Soil Features

Table 17 gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A *restrictive layer* is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, and dense layers. The table indicates the hardness of the restrictive layer, which significantly affects the ease of excavation. *Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low, moderate,* or *high,* is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low, moderate,* or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories *(15, 16)*. Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those observations or from laboratory measurements. Table 18 shows the classification of the soils in the survey area. The categories are defined in the following paragraphs.

ORDER. Twelve soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in *sol*. An example is Ultisol.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is Udult (*Ud*, meaning humid, plus *ult*, from Ultisol).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; type of saturation; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is Hapludults (*Hapl*, meaning minimal horizonation, plus *udult*, the suborder of the Ultisols that has a udic moisture regime).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic subgroup is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other taxonomic class. Each subgroup is identified by one or more adjectives preceding the name of the great group. An example is Aquic Hapludults.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle-size class, mineralogy class, cation-exchange activity class, soil temperature regime, soil depth, and reaction class. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is fine, mixed, subactive, thermic Aquic Hapludults.

SERIES. The series consists of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile.

Soil Series and Their Morphology

In this section, each soil series recognized in the survey area is described. Characteristics of the soil and the material in which it formed are identified for each series. A pedon, a small three-dimensional area of soil, that is typical of the series in the survey area is described. The detailed description of each soil horizon follows

standards in the “Soil Survey Manual” *(18)* and in the “Field Book for Describing and Sampling Soils” *(11)*. Many of the technical terms used in the descriptions are defined in “Soil Taxonomy” *(15)* and in “Keys to Soil Taxonomy” *(16)*. Unless otherwise indicated, colors in the descriptions are for moist soil. Following the pedon description is the range of important characteristics of the soils in the series.

Albany Series

Geomorphic setting: Marine terraces on lower coastal plains
Parent material: Loamy and sandy marine deposits
Drainage class: Somewhat poorly drained
Permeability: Moderate
Depth class: Very deep
Slope range: 0 to 2 percent
Commonly associated soils: Blanton, Chipley, Echaw, Leefield, Meldrim, Ocilla, Ridgeland, and Rigdon
Taxonomic classification: Loamy, siliceous, subactive, thermic Aquic Arenic Paleudults

Typical Pedon

Albany loamy sand, 0 to 2 percent slopes; about 2.3 miles north on Midland Road from the intersection of Midland Road and Georgia Highway 30, about 600 feet east of the road; in Effingham County, Georgia; Meldrim, GA 7.5-minute topographic quadrangle; lat. 32 degrees 13 minutes 31 seconds N. and long. 81 degrees 19 minutes 04 seconds W.

Ap—0 to 10 inches; very dark grayish brown (10YR 3/2) loamy sand; weak fine granular structure; very friable; many fine and common medium roots; very strongly acid; abrupt smooth boundary.
E1—10 to 25 inches; pale brown (10YR 6/3) loamy sand; weak fine granular structure; very friable; few fine yellowish brown (10YR 5/4) masses of iron accumulations; few fine roots; very strongly acid; clear wavy boundary.
E2—25 to 47 inches; yellowish brown (10YR 5/4) loamy sand; weak fine granular structure; very friable; common medium prominent brown (7.5YR 5/4) and few fine prominent light gray (10YR 7/2) iron depletions; very strongly acid; gradual wavy boundary.
Btg1—47 to 60 inches; gray (10YR 6/1) sandy loam; weak medium subangular blocky structure; friable; sand grains coated and bridged with clay; few lenses of light gray sand; common coarse prominent strong brown (7.5YR 5/8); very strongly acid; gradual smooth boundary.
Btg2—60 to 72 inches; 40 percent light brownish gray (10YR 7/1), 30 percent red (2.5YR 4/8), and 30 percent strong brown (7.5YR 5/8) sandy clay loam; moderate medium subangular blocky structure; friable; discontinuous clay films in some pores; sand grains coated and bridged with clay; few fine lenses of light gray sand; very strongly acid.

Range in Characteristics

Thickness of the solum: 70 to more than 80 inches
Reaction: Extremely acid to moderately acid
Plinthite: Less than 5 percent above a depth of 60 inches; ranging from 0 to 10 percent between depths of 60 and 80 inches

A or Ap horizon:
Color—hue of 10YR to 5Y, value of 2 to 6, and chroma of 1 or 2
Texture—sand, fine sand, loamy sand, or loamy fine sand

E horizon:
Color—hue of 10YR or 2.5Y, value of 5 to 8, and chroma of 3 to 8
Texture—sand, fine sand, loamy sand, or loamy fine sand
Redoximorphic features—common or many iron depletions in shades of light brownish gray and common masses of oxidized iron in shades of strong brown

BE horizon (if it occurs):
Color—hue of 10 or 2.5Y, value of 4 to 8, and chroma of 4 to 6
Texture—sandy loam, fine sandy loam, loamy sand, or loamy fine sand
Redoximorphic features—common or many iron depletions in shades of light brownish gray and common or many masses of oxidized iron in shades of strong brown

Bt horizon (if it occurs):
Color—hue of 7.5YR to 2.5Y, value of 4 to 8, and chroma of 3 to 8
Texture—sandy loam, fine sandy loam, or sandy clay loam
Redoximorphic features—common or many iron depletions in shades of light and common or many masses of oxidized iron in shades of yellowish brown

Btv horizon (if it occurs):
Color—hue of 7.5YR or 2.5Y, value of 4 or 8, and chroma of 3 to 8
Texture—sandy loam, fine sandy loam, or sandy clay loam
Redoximorphic features—common or many iron depletions in shades of light gray and common or many masses of oxidized iron in shades of light brown to strong brown

Btg horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 8, and chroma of 1 or 2
Texture—sandy loam, fine sandy loam or sandy clay loam
Redoximorphic features—common or many masses of oxidized iron shades of yellowish brown to strong brown

Bladen Series

Landform: Stream terraces
Parent material: Clayey fluviomarine deposits
Drainage class: Poorly drained
Permeability: Slow
Depth class: Very deep
Slope range: 0 to 2 percent
Commonly associated soils: Eulonia, Wahee, Surrency, Chastain, and Tawcaw
Taxonomic classification: Fine, mixed, semiactive, thermic Typic Albaquults

Typical Pedon

Bladen fine sandy loam, 0 to 2 percent slopes; from Townsend, 2 miles north to Huxford, west 0.3 mile from Huxford across Seaboard Coastline Railroad, north 500 yards on Tram Road, on the east side of the road; in McIntosh County, Georgia; Townsend, GA 7.5-minute topographic quadrangle; lat. 31 degrees 34 minutes 00 seconds N. and long. 81 degrees 30 minutes 53 seconds W.

A—0 to 7 inches; black (10YR 2/1) fine sandy loam; weak fine granular structure; very friable; many fine roots; very strongly acid; clear smooth boundary.
E1—7 to 9 inches; light brownish gray (2.5Y 6/2) fine sandy loam; weak fine and medium subangular blocky structure parting to weak fine granular; friable; common fine roots; common medium prominent brownish yellow (10YR 6/8) masses of oxidized iron; very strongly acid; clear wavy boundary.

E2—9 to 14 inches; grayish brown (2.5Y 5/2) fine sandy loam; weak fine and medium subangular blocky structure parting to weak fine granular; friable; few fine roots; many coarse distinct yellowish brown (10YR 5/6) masses of oxidized iron and many coarse faint light brownish gray (2.5Y 6/2) iron depletions; strongly acid; abrupt smooth boundary.

Btg1—14 to 30 inches; gray (N 5/0) clay; moderate medium subangular blocky structure; very firm; common faint clay films on faces of most peds; few fine prominent dark red (10R 3/6) and common medium prominent yellowish brown (10YR 5/6) masses of oxidized iron; strongly acid; gradual smooth boundary.

Btg2—30 to 41 inches; gray (N 5/0) clay; moderate subangular blocky structure; very firm; common distinct clay films on faces of peds; few medium prominent dark red (10R 3/6) and many medium prominent yellowish brown (10YR 5/6) masses of oxidized iron; very strongly acid; gradual smooth boundary.

Btg3—41 to 80 inches; dark gray (5Y 4/1) clay; moderate subangular blocky structure; very firm; few faint clay films on faces of peds; common fine prominent red (2.5YR 4/6) and many coarse prominent strong brown (7.5YR 5/8) masses of oxidized iron; very strongly acid.

Range in Characteristics

Thickness of the solum: Greater than 60 inches
Thickness of the sandy epipedon: 6 to 19 inches
Rock fragments: 0 to 5 percent rounded quartz fragments
Reaction: Extremely acid to strongly acid, except for the surface layer in limed areas

A horizon:
- Color—horizon has hue of 10YR, 2.5Y, or 5Y, value of 2 to 5, and chroma of 1 or 2 or is neutral in hue and has value of 2 to 5
- Texture—sandy loam and fine sandy loam

E horizon:
- Color—horizon has hue of 10YR, 2.5Y, or 5Y, value of 5 to 7, and chroma of 1 or 2 or is neutral in hue and has value of 5 to 7
- Texture—sandy loam and fine sandy loam
- Redoximorphic features—few or common masses of oxidized iron in shades of red, yellow, or brown and few or common iron depletions in shades of brown, yellow, olive, or gray

BE horizon (if it occurs):
- Color—horizon has hue of 10YR, 2.5Y, or 5Y, value of 4 to 6, and chroma of 1 or 2 or is neutral in hue and has value of 4 to 7
- Texture—sandy loam or sandy clay loam

Redoximorphic features (if they occur)—few or common masses of oxidized iron in shades of red, yellow, or brown and iron depletions in shades of brown, yellow, olive, or gray

Btg horizon:
- Color—horizon has hue of 10YR, 2.5Y, or 5Y, value of 4 to 7, and chroma of 1 or 2 or is neutral in hue and has value of 4 to 7
- Texture—clay, sandy clay, or clay loam; thin lenses, tongues, and pockets of sandy loam or loamy sand are common
- Redoximorphic features—masses of oxidized iron in shades of red, yellow, or brown
- Other characteristics—average clay content of the upper 20 inches of the Bt horizon ranges from 35 to 55 percent; silt content is less than 30 percent

BCg horizon:
- Color—horizon has hue of 10YR, 2.5Y, or 5Y, value of 4 to 7, and chroma of 1 or 2 or is neutral in hue and has value of 4 to 7

Texture—clay, sandy clay, sandy clay loam, or clay loam; thin lenses, tongues, and pockets of sandy loam or loamy sand are common
Redoximorphic features—few to many masses of oxidized iron in shades of red, yellow, or brown

Cg horizon:
Color—horizon has hue of 10YR, 2.5Y, or 5Y, value of 4 to 7, and chroma of 1 or 2 or is neutral in hue and has value of 4 to 7
Texture—variable or stratified with sandy to clayey materials
Redoximorphic features—few to many masses of oxidized iron in shades of red, yellow, or brown

Blanton Series

Landform: Broad interstream divides on marine terraces
Parent material: Loamy and clayey marine deposits
Drainage class: Somewhat excessively drained or well drained
Permeability: Moderate
Depth class: Very deep
Slope range: 0 to 5 percent
Commonly associated soils: Albany, Bonifay, Foxworth, Fuquay, Meldrim, and Remlik
Taxonomic classification: Loamy, siliceous, semiactive, thermic Grossarenic Paleudults

Typical Pedon

Blanton sand in an area of Blanton-Foxworth complex, 0 to 5 percent slopes; about 0.5 mile south on Laurel Street from its intersection with GA Highway 119, about 9.4 miles east on Stillwell-Clyo Road, 2.2 miles north on Laurel Tree Road, 250 feet east of the road; in Effingham County, Georgia; Hardeeville, NW SC-GA 7.5-minute quadrangle; lat. 32 degrees 28 minutes 39 seconds N. and long. 81 degrees 13 minutes 03 seconds W.

A—0 to 8 inches; brown (10YR 4/3) sand; single grain; loose; many fine and medium roots; moderately acid; clear wavy boundary.
E1—8 to 42 inches; light olive brown (2.5Y 5/4) sand; single grain; loose; many fine and few medium roots; moderately acid; gradual wavy boundary.
E2—42 to 60 inches; pale yellow (2.5Y 7/3) sand; single grain; loose; pockets of very pale brown (10YR 8/2) uncoated sand grains; few fine roots; few fine prominent yellowish brown (10YR 5/6) masses of oxidized iron; moderately acid; gradual wavy boundary.
E3—60 to 70 inches; pale yellow (2.5Y 7/3) sand; single grain; loose; many very pale brown (10YR 8/2) uncoated sand grains; common medium prominent strong brown (7.5YR 5/8) and common medium prominent strong brown (7.5YR 5/6) masses of oxidized iron and common medium distinct light brownish gray (10YR 6/2) iron depletions; strongly acid; gradual wavy boundary.
Bt1—70 to 75 inches; strong brown (7.5YR 5/6) sandy loam; weak medium subangular blocky structure; friable; sand grains coated and bridged with clay; strongly acid; gradual wavy boundary.
Bt2—75 to 80 inches; strong brown (7.5YR 5/6) sandy clay loam; weak medium subangular blocky structure; friable; strongly acid.

Range in Characteristics

Thickness of the solum: 60 to more than 80 inches
Thickness of the sandy epipedon: 46 to 75 inches

Plinthite: Less than 5 percent above a depth of 60 inches; ranging from 0 to 10 percent between a depth of 60 and 80 inches
Reaction: Very strongly acid to moderately acid

A or Ap horizon:
Color—hue of 10YR or 2.5YR, value of 3 or 7, and chroma of 1 to 4
Texture—sand, fine sand, coarse sand, loamy sand, or loamy fine sand

E horizon:
Color—hue of 7.5YR to 2.5Y, value of 5 to 8, and chroma of 1 to 8
Texture—sand, fine sand, coarse sand, loamy sand, or loamy fine sand
Redoximorphic features—few or common masses of oxidized iron in shades of brown or yellow and few or common iron depletions in shades of light brownish gray

BE horizon (if it occurs):
Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 3 to 8
Texture—loamy sand, loamy coarse sand, loamy fine sand, or sandy loam
Redoximorphic features—few or common masses of oxidized iron in shades of brown or yellow and few or common iron depletions in shades of light brownish gray

Bt horizon:
Color—hue of 7.5YR to 2.5Y, value of 5 to 7, and chroma of 3 to 8
Texture—loamy sand, loamy coarse sand, loamy fine sand, sandy loam, fine sandy loam, or sandy clay loam
Redoximorphic features—light brownish gray or yellowish brown

Btv horizon (if it occurs):
Color—hue of 7.5YR to 2.5Y, value of 5 to 7, and chroma of 3 to 8
Texture—loamy sand, loamy coarse sand, loamy fine sand, sandy loam, fine sandy loam, or sandy clay loam
Redoximorphic features—few or common masses of oxidized iron in shades of brown or yellow and few or common iron depletions in shades of light brownish gray

Btg horizon (if it occurs):
Color—hue of 7.5YR to 5Y, value of 5 to 8, and chroma of 1 or 2
Texture—sandy loam, fine sandy loam, or sandy clay loam; ranging to sandy clay loam below a depth of 60 inches
Redoximorphic features—few to many masses of oxidized iron in shades of yellowish brown to strong brown

Boulogne Series

Landform: Flats on marine terraces
Parent material: Sandy marine deposits
Drainage class: Poorly drained
Permeability: Slow
Depth class: Very deep
Slope range: 0 to 2 percent
Commonly associated soils: Echaw, Leon, Mascotte, Pickney, Ridgeland, and Rigdon
Taxonomic classification: Sandy, siliceous, thermic Typic Alaquods

Typical Pedon

Boulogne sand in an area of Ridgeland-Boulogne complex, 0 to 2 percent slopes; about 3.2 miles south from the intersection of GA Highway 17 and GA Highway 119,

about 3.4 miles southeast from the intersection of GA Highway 17 and Midland Road, 650 feet north along an unimproved woods road, 100 feet west of the road; in Effingham County, Georgia; Meldrim, GA 7.5-minute topographic quadrangle; lat. 32 degrees 14 minutes 29 seconds N. and long. 81 degrees 20 minutes 11 seconds W.

A—0 to 9 inches; very dark gray (10YR 3/1) sand; single grain; loose; common fine and medium and few large roots; very strongly acid; clear smooth boundary.
E—9 to 11 inches; dark gray (10YR 4/1) sand; single grain; loose; common medium and few fine roots; very strongly acid; clear smooth boundary.
Bh—11 to 16 inches; black (5YR 2.5/1) sand; massive; friable; common fine and medium and few large roots; very strongly acid; clear smooth boundary.
E/Bh—16 to 21 inches; brown (7.5YR 4/2) and very dark grayish brown (10YR 3/2) sand; massive; friable; common medium faint dark grayish brown (10YR 4/2) iron depletions; few fine and medium roots; very strongly acid; gradual smooth boundary.
E´—21 to 39 inches; light brownish gray (10YR 6/2) sand; single grain; loose; common fine prominent strong brown (7.5YR 5/6) and moderate medium prominent brownish yellow (10YR 6/6) masses of oxidized iron; few fine and medium roots; very strongly acid; clear smooth boundary.
B´h1—39 to 56 inches; very dark gray (7.5YR 3/1) loamy sand; weak fine subangular blocky structure; very friable; few fine prominent brownish yellow (10YR 6/8) masses of oxidized iron and few fine distinct grayish brown (10YR 5/2) iron depletions; few fine and medium roots; very strongly acid; gradual smooth boundary.
B´h2—56 to 74 inches; dark brown (7.5YR 3/2) loamy sand; weak fine granular structure; very friable; common medium prominent strong brown (7.5YR 5/6) masses of oxidized iron; very strongly acid: gradual wavy boundary.
B´h3—74 to 80 inches; dark brown (7.5YR 3/3) sand; single grain; loose; very strongly acid.

Range in Characteristics

Thickness of the solum: More than 80 inches
Depth to top of Bh horizon: 4 to 9 inches
Reaction: Extremely acid to moderately acid

A horizon:
Color—hue of 10YR, value of 2 to 4, and chroma of 1 or 2
Texture—sand and fine sand

Incipient E horizon:
Color—hue of 10YR, value of 4 to 7, and chroma of 1 or 2
Texture—sand or fine sand

Bh horizon:
Color—hue of 5YR, 7.5YR, or 10YR, value of 2 or 3, and chroma of 1 to 3
Texture—sand, fine sand, loamy sand, or loamy fine sand
Redoximorphic features—few or common masses of oxidized iron in shades of brown and iron depletions in shades of gray

E or E´ horizon:
Color—hue of 10YR, value of 4 to 7, and chroma of 1 or 2
Texture—sand or fine sand
Redoximorphic features—common or many masses of oxidized iron in shades of brown or yellow

B´h horizon:
Color—hue of 5YR to 7.5YR, value of 2 or 3, and chroma of 1 to 3

Texture—sand, fine sand, loamy sand, or loamy fine sand
Redoximorphic features—few or common masses of oxidized iron in shades of brown or yellow and iron depletions in shades of gray

Centenary Series

Landform: Flats on marine terraces
Parent material: Sandy marine deposits
Drainage class: Well drained or somewhat excessively drained
Permeability: Moderately rapid
Depth class: Very deep
Slope range: 0 to 5 percent
Commonly associated soils: Chipley, Echaw, Foxworth, Leon, Ridgeland, and Rigdon
Taxonomic classification: Sandy, siliceous, thermic Entic Grossarenic Alorthods

Typical Pedon

Centenary sand in an area of Echaw-Centenary complex, 0 to 2 percent slopes; about 1.0 mile northwest on Old Louisville Road from its intersection with GA Highway 119, about 3.9 miles west on Old River Road, 125 feet south of the road; in Effingham County, Georgia; Guyton GA, 7.5-minute topographic quadrangle; lat. 32 degrees 39 minutes 17 seconds N. and long. 81 degrees 26 minutes 41 seconds W.

A—0 to 5 inches; very dark grayish brown (10YR 3/2) sand; single grain; loose; many fine and few medium roots; very strongly acid; clear smooth boundary.
E1—5 to 28 inches; yellowish brown (10YR 5/4) sand; single grain; loose; few (10YR 8/1) uncoated sand grains; common fine and medium roots; very strongly acid; clear wavy boundary.
E2—28 to 47 inches; brownish yellow (10YR 6/6) sand; single grain; loose; common (10YR 8/1) uncoated sand grains; few fine roots; very strongly acid; gradual wavy boundary.
E3—47 to 54 inches; light yellowish brown (10YR 6/4) sand; single grain; loose; common medium faint yellowish brown (10YR 5/6) masses of oxidized iron and common medium distinct light brownish gray (10YR 6/2) iron depletions; few fine roots; very strongly acid; gradual wavy boundary.
E4—54 to 62 inches; brown (10YR 5/3) sand; single grain; loose; common medium distinct light brownish gray (10YR 6/2) iron depletions. few fine roots; very strongly acid; gradual wavy boundary.
Bh—62 to 80 inches; dark reddish brown (5YR 3/2) sand; single grain; loose; very strongly acid.

Range in Characteristics

Thickness of the solum: More than 80 inches
Depth to the top of the Bh horizon: 55 to 80 inches
Reaction: Very strongly acid to slightly acid, except for the surface layer in limed areas

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 1 to 3
Texture—sand or fine sand

E horizon (upper part):
Color—hue of 7.5YR to 2.5Y, value of 5 to 8, and chroma of 3 to 8
Texture—sand or fine sand

E horizon (lower part):
Color—hue of 7.5YR or 10YR, value of 5 to 8, and chroma of 1 to 4
Texture—sand or fine sand

Bh horizon:
Color—hue of 5YR to 10YR, value of 2 to 4, and chroma of 1 or 2
Texture—loamy sand, sand, or fine sand

C horizon (if it occurs):
Color—hue of 10YR, value of 4 to 7, and chroma of 1 or 6
Texture—loamy sand, sand, or fine sand

Chastain Series

Landform: Flood plains
Parent material: Silty and clayey alluvium
Drainage class: Poorly drained
Permeability: Slow
Depth class: Very deep
Slope range: 0 to 2 percent
Commonly associated soils: Bladen, Eulonia, Levy, and Tawcaw
Taxonomic classification: Fine, mixed, semiactive, acid, thermic Fluvaquentic Endoaquepts

Typical Pedon

Chastain loam in an area of Chastain and Tawcaw soils, 0 to 2 percent slopes, frequently flooded; about 2.9 miles southeast from Oliver, on Old Louisville Road, 1.7 miles west on an unimproved road, 50 feet north of the road; Effingham County, Georgia; Leefield GA 7.5-minute topographic quadrangle; lat. 32 degrees 28 minutes 39 seconds N. and long. 81 degrees 32 minutes 8.45 seconds W.

A—0 to 4 inches; dark grayish brown (10YR 4/2) loam; weak fine granular structure; very friable; many fine and medium roots; very strongly acid; clear smooth boundary.

Bg1—4 to 25 inches; grayish brown (10YR 5/2) clay; moderate medium angular blocky structure; firm; common fine prominent yellowish red (5YR 5/8) masses of oxidized iron; few fine and medium roots; very strongly acid; gradual wavy boundary.

Bg2—25 to 36 inches; grayish brown (10YR 5/2) clay; moderate medium angular blocky structure; firm; many fine prominent yellowish red (5YR 5/8) and strong brown (7.5YR 5/8) masses of oxidized iron; few medium roots; very strongly acid; gradual wavy boundary.

Cg1—36 to 51 inches; grayish brown (10YR 5/2) sandy clay loam; weak medium subangular blocky structure; friable; common fine prominent strong brown (7.5YR 5/8) masses of oxidized iron; few medium roots; very strongly acid; gradual wavy boundary.

Cg2—51 to 58 inches; light brownish gray (10YR 6/2) sandy clay loam; weak medium subangular blocky structure; friable; common medium prominent strong brown (7.5YR 5/8) masses of oxidized iron; few medium roots; very strongly acid; clear wavy boundary.

2Cg—58 to 80 inches; light brownish gray (10YR 6/2) sand; single grain; loose; common fine prominent strong brown (7.5YR 5/8) masses of oxidized iron; strongly acid.

Range in Characteristics

Thickness of the solum: 25 to more than 60 inches
Reaction: Extremely acid to moderately acid; moderately acid is restricted to depths below 40 inches

A horizon:
Color—hue of 7.5YR to 10YR, value of 4 to 7, and chroma of 1 to 4
Texture—loam, silt loam, silty clay loam, silty clay, clay loam, or clay
Redoximorphic features (if they occur)—masses of oxidized iron in shades of red, yellow, or brown and iron depletions in shades of brown, yellow, olive, or gray

Bg horizon:
Color—horizon has hue of 7.5YR or 10YR, value of 4 to 7, and chroma of 1 or 2 or is neutral in hue and has value of 4 to 7
Texture—silty clay loam, clay loam, silty clay, or clay
Redoximorphic features—masses of oxidized iron in shades of red, yellow, or brown and iron depletions in shades of brown, yellow, olive, or gray

Cg horizon:
Color—hue of 10YR, value of 4 to 7, and chroma of 1 or 2
Texture—sandy clay loam and silty clay loam
Redoximorphic features—masses of oxidized iron in shades of red, yellow, or brown and iron depletions in shades of brown, yellow, olive, or gray

2Cg horizon:
Color—hue of 10YR, value of 4 to 7, and chroma of 1 or 2
Texture—variable; ranging from sandy to clayey material
Redoximorphic features—masses of oxidized iron in shades of red, yellow, or brown and iron depletions in shades of brown, yellow, olive, or gray

Chipley Series

Landform: Flats on marine terraces
Parent material: Sandy marine deposits
Drainage class: Somewhat poorly drained
Permeability: Rapid
Depth class: Very deep
Slope range: 0 to 2 percent
Commonly associated soils: Centenary, Echaw, Foxworth, Leefield, and Meldrim
Taxonomic classification: Thermic, coated Aquic Quartzipsamments

Typical Pedon

Chipley sand, 0 to 2 percent slopes; about 5.9 miles south of Guyton on GA Highway 17 from the intersection of GA Highway 17 and GA Highway 119, about 0.15 mile northeast on Courthouse Road, 150 feet east of the road; in Effingham County, Georgia; Springfield South GA 7.5-minute topographic quadrangle; lat. 32 degrees 15 minutes 00 seconds N. and long. 81 degrees 22 minutes 30 seconds W.

Ap—0 to 8 inches; very dark grayish brown (10YR 3/2) sand; single grain; loose; many fine roots; strongly acid; clear wavy boundary.
C1—8 to 20 inches; brownish yellow (10YR 6/6) sand; single grain; loose; many fine roots; strongly acid; clear wavy boundary.
C2—20 to 28 inches; brownish yellow (10YR 6/6) sand; single grain; loose; few or common uncoated sand grains; common medium faint strong brown (7.5YR 5/6) masses of oxidized iron and common medium prominent light gray (10YR 7/1) iron depletions; few fine roots; strongly acid; gradual wavy boundary.
C3—28 to 35 inches; brownish yellow (10YR 6/6) sand; single grain; loose; common uncoated white (10YR 8/1) sand grains; common fine roots; very strongly acid; gradual wavy boundary.
C4—35 to 59 inches; yellow (10YR 7/6) sand; single grain; loose; common uncoated sand grains; common medium distinct strong brown (7.5YR 5/6) masses of

oxidized iron and common medium prominent light gray (10YR 7/1) iron depletions; common fine roots; strongly acid; gradual wavy boundary.
Cg1—59 to 66 inches; light gray (10YR 7/1) sand; single grain; loose; common medium distinct light yellowish brown (10YR 6/4) masses of oxidized iron and very pale brown (10YR 7/3) iron depletions; few fine roots; strongly acid; gradual wavy boundary.
Cg2—66 to 80 inches; 40 percent light gray (10YR 7/2), 20 percent very pale brown (10YR 7/3), 20 percent strong brown (7.5YR 5/6), and 20 percent light reddish brown (2.5YR 6/4) sand; single grain; loose; strongly acid.

Range in Characteristics

Thickness of sandy material: Greater than 80 inches
Reaction: Extremely acid to moderately acid in the A horizon and very strongly acid to slightly acid in the C horizon

A or Ap horizon:
Color—hue of 10YR, value of 2 to 5, and chroma of 1 to 3
Texture—sand or find sand

C horizon:
Color—hue of 10YR to 5Y, value of 4 to 8, and chroma of 1 to 8
Texture—sand or fine sand

Cg horizon:
Color—hue of 10YR to 5Y, value of 4 to 8, and chroma of 1 or 2
Texture—sand or fine sand

Clarendon Series

Landform: Flats on marine terraces
Parent material: Loamy marine deposits
Drainage class: Moderately well drained
Permeability: Moderately slow
Depth class: Very deep
Slope range: 0 to 2 percent
Commonly associated soils: Dothan, Fuquay, Leefield, Rains, and Stilson
Taxonomic classification: Fine-loamy, siliceous, semiactive, thermic Plinthaquic Paleudults

Typical Pedon

Clarendon loamy sand, 0 to 3 percent slopes; about 0.1 mile west from the intersection of GA Highway 24 and GA Highway 17, about 4.8 miles south from the intersection of GA Highway 24 and Old Louisville Road, 0.9 mile east on an improved woods road, 50 feet west of the road; in Effingham County, Georgia; Springfield North GA 7.5-minute topographic quadrangle; lat. 32 degrees 27 minutes 22 seconds N. and long. 81 degrees 30 minutes 09 seconds W.

Ap—0 to 6 inches; very dark grayish brown (10YR 3/2) loamy sand; weak fine granular structure; very friable; many fine and common medium roots; moderately acid; clear smooth boundary.
E—6 to 16 inches; light yellowish brown (2.5Y 6/4) loamy sand; weak fine granular structure; very friable; common fine roots; moderately acid; clear smooth boundary.
Bt1—16 to 21 inches; light yellowish brown (2.5Y 6/4) sandy loam; weak fine subangular blocky structure; friable; few fine roots; strongly acid; clear smooth boundary.

Bt2—21 to 26 inches; light yellowish brown (2.5Y 6/4) sandy clay loam; weak fine subangular blocky structure; friable; few patchy clay films on faces of peds; common medium distinct yellowish brown (10YR 5/6) and few medium prominent strong brown (7.5YR 5/6) masses of oxidized iron; common medium faint pale brown (10YR 6/3) iron depletions; few fine roots; strongly acid; clear smooth boundary.

Bt3—26 to 38 inches; brownish yellow (10YR 6/6) sandy clay loam; weak medium subangular blocky structure; friable; few faint clay films on faces of peds; few medium faint strong brown (7.5YR 5/6) and common medium faint yellowish brown (10YR 5/6) masses of oxidized iron and common medium prominent light brownish gray (10YR 6/2) and pale brown (10YR 6/3) iron depletions; strongly acid; gradual wavy boundary.

Btgv1—38 to 52 inches; light brownish gray (10YR 6/2) sandy clay loam; moderate medium subangular blocky structure; friable; few distinct clay films on faces of peds; 10 percent nodular plinthite; few medium prominent red (2.5YR 4/8) and common medium prominent yellowish brown (10YR 5/6) masses of oxidized iron and common medium faint pale brown (10YR 6/3) iron depletions; few fine roots; few fine pores; strongly acid; gradual wavy boundary.

Btgv2—52 to 60 inches; light gray (10YR 7/1) sandy clay loam; moderate medium subangular blocky structure; friable; few distinct clay films on faces of peds; 8 percent nodular plinthite; few medium prominent red (2.5YR 4/8) and common medium prominent yellowish brown (10YR 5/6) masses of oxidized iron; few fine roots; few fine pores; strongly acid; gradual wavy boundary.

BCg—60 to 80 inches; light gray (10YR 7/1) sandy clay loam; friable; common coarse prominent red (2.5YR 4/8) and yellowish brown (10YR 5/6) masses of oxidized iron; few fine pores; strongly acid.

Range in Characteristics

Thickness of the solum: 60 to more than 80 inches

Thickness of sandy material: 4 to 19 inches

Plinthite: 5 to 15 percent between a depth of 21 and 60 inches

Rock fragments: 0 to 5 percent, by volume, ironstone nodules in the A and E horizons and in the upper part of the Bt horizon

Reaction: Very strongly acid to slightly acid, except for the surface layer in limed areas

A or Ap horizon:

Color—hue of 10YR, value of 3 to 6, and chroma of 1 or 2

Texture—loamy sand

E horizon:

Color—hue of 2.5Y or 10YR, value of 5 to 7, and chroma of 2 to 4

Texture—loamy sand

Bt horizon:

Color—hue of 10YR or 2.5Y, value of 5 to 6, and chroma of 4 to 8

Texture—sandy loam or sandy clay loam

Redoximorphic features—few to many masses of oxidized iron in shades of red, brown, or yellow and iron depletions in shades of gray

Btv horizon:

Color—hue of 10YR, value of 5 to 7, and chroma of 3 to 6

Texture—sandy clay loam

Redoximorphic features—few to many masses of oxidized iron in shades of red, brown, or yellow and iron depletions in shades of gray

Btgv horizon:

Color—hue of 10YR, value of 5 to 7, and chroma of 1 or 2

Texture—sandy clay loam
Redoximorphic features—few to many masses of oxidized iron in shades of red, brown, or yellow and iron depletions in shades of gray

BCg horizon:
Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 1 or 2
Texture—sandy loam or sandy clay loam
Redoximorphic features—common or many masses of oxidized iron in shades of red, brown, or yellow and iron depletions in shades of gray

Dasher Series

Landform: Swamps
Parent material: Organic material, such as hydrophytic plants
Drainage class: Very poorly drained
Permeability: Moderately rapid
Depth class: Very deep
Slope range: 0 to 1 percent
Taxonomic classification: Dysic, thermic Typic Haplohemists

Typical Pedon

Dasher mucky peat, 0 to 1 percent slopes, recently drained marsh; about 1.9 miles northwest of Clyattville, Georgia, in Lanes pond; in Lowndes County, Georgia; Clyattville, GA 7.5-minute topographic quadrangle; lat. 30 degrees 43 minutes 31 seconds N. and long. 83 degrees 21 minutes 21 seconds W.

Oe1—0 to 8 inches; black (5YR 2/1) unrubbed and rubbed partially decomposed organic material; about 36 percent fiber, 20 percent rubbed; weak medium granular structure; slightly sticky; estimated 2 percent mineral material; sodium pyrophosphate extract color is light yellowish brown (10YR 6/4); extremely acid; abrupt wavy boundary.
Oe2—8 to 20 inches; dark reddish brown (5YR 2/2) rubbed and unrubbed partially decomposed organic material; about 36 percent fiber, 20 percent rubbed; massive; very friable; estimated 2 to 5 percent mineral material; sodium pyrophosphate extract color is very pale brown (10YR 7/4); extremely acid; clear wavy boundary.
Oe3—20 to 40 inches; dark reddish brown (5YR 3/3) rubbed and unrubbed partially decomposed organic material; about 40 percent fiber, 25 percent rubbed; massive; very friable; estimated 2 to 5 percent mineral material; sodium pyrophosphate extract color is very pale brown (10YR 7/3); extremely acid; clear wavy boundary.
Oe4—40 to 75 inches; dark brown (7.5YR 3/2) rubbed and unrubbed partially decomposed organic material; about 55 percent fiber, 30 percent rubbed; massive; very friable; estimated 2 to 5 percent mineral material; extremely acid; sodium pyrophosphate extract color is white (10YR 8/1).

Range in Characteristics

Thickness of organic material: 51 inches to more than 75 inches
Reaction: Extremely acid or very strongly acid

Oe1 horizon:
Color—hue of 5YR or 10YR, value of 2 or 3, and chroma of 0 to 3
Fiber content—average of about 35 to 50 percent unrubbed and 18 to 25 percent rubbed
Mineral content—2 to 5 percent

Oa horizon (if it occurs):
Color—hue of 5YR or 10YR, value of 2 or 3, and chroma of 0 to 3
Fiber content—average of about 25 to 35 percent unrubbed and 12 to 18 percent rubbed
Mineral content—2 to 5 percent

Oe2 and Oe3 horizons:
Color—hue of 5YR or 10YR, value of 2 or 3, and chroma of 1 to 3
Fiber content—average of about 35 to 50 percent unrubbed and 18 to 25 percent rubbed
Mineral content—2 to 5 percent

Oe4 horizon:
Color—hue of 5YR or 10YR, value of 2 or 3, and chroma of 1 to 3
Fiber content—average of about 50 to 65 percent unrubbed and 25 to 35 percent rubbed
Mineral content—2 to 5 percent

2C horizon (if it occurs):
Color—hue of 10YR to 5Y, value of 7 or 8, and chroma of 1 or 2
Texture—sand or fine sand

Dothan Series

Landform: Flats on marine terraces
Parent material: Loamy marine deposits
Drainage class: Well drained
Permeability: Moderately slow
Depth class: Very deep
Slope range: 0 to 2 percent
Commonly associated soils: Clarendon, Fuquay, Leefield, and Stilson
Taxonomic classification: Fine-loamy, kaolinitic, thermic Plinthic Kandiudults

Typical Pedon

Dothan loamy sand in an area of Dothan-Clarendon complex, 0 to 2 percent slopes; about 1.9 miles northwest on Old Dixie Highway from its intersection with GA Highway 119, about 75 feet west of the road in a cultivated field; in Effingham County, Georgia; Springfield North, GA 7.5-minute topographic quadrangle; lat. 32 degrees 24 minutes 17 seconds N. and long 81 degrees 19 minutes 03 seconds W.

Ap—0 to 9 inches; brown (10YR 4/3) loamy sand; weak fine granular structure; very friable; many fine and common medium roots; moderately acid; abrupt smooth boundary.
E—9 to 17 inches; yellowish brown (10YR 5/4) loamy sand; weak fine granular structure; very friable; common fine roots; moderately acid; clear smooth boundary.
Bt—17 to 42 inches; yellowish brown (10YR 5/6) sandy loam; weak fine subangular blocky structure; friable; few faint clay films on faces of peds; common medium faint strong brown (7.5YR 5/6) masses of oxidized iron; few fine roots; strongly acid; clear smooth boundary.
Btv1—42 to 52 inches; yellowish brown (10YR 5/4) sandy clay loam; weak fine subangular blocky structure; common faint clay films on faces of peds; 7 percent nodular plinthite; common medium distinct strong brown (7.5YR 5/6) masses of oxidized iron; few fine roots; strongly acid; clear smooth boundary.

Btv2—52 to 62 inches; yellowish brown (10YR 5/4) sandy clay loam; weak medium subangular blocky structure; common faint clay films on faces of peds; 10 percent nodular plinthite; common medium prominent yellowish red (5YR 5/8) and common medium distinct strong brown (7.5YR 5/6) masses of oxidized iron and common medium faint pale brown (10YR 6/3) and common medium distinct light brownish gray (10YR 6/2) iron depletions; few fine roots; strongly acid; gradual wavy boundary.

Btv3—62 to 68 inches; 40 percent light brownish gray (10YR 6/2), 30 percent strong brown (7.5YR 5/6), and 30 percent yellowish brown (10YR 5/4) sandy clay loam; moderate medium subangular blocky structure; few faint clay films on faces of peds; 7 percent nodular plinthite; few fine roots; few fine pores; strongly acid; gradual wavy boundary.

BC1—68 to 74 inches; 25 percent red (2.5YR 4/8), 25 percent strong brown (7.5YR 5/6), 25 percent light yellowish brown (10YR 6/4), and 25 percent light brownish gray (10YR 6/2) sandy clay loam; moderate medium subangular blocky structure; few distinct clay films on faces of peds; few fine pores; strongly acid; gradual wavy boundary.

BC2—74 to 80 inches; 40 percent light gray (10YR 7/2), 30 percent very pale brown (10YR 7/4), and 30 percent yellowish brown (10YR 5/6) sandy clay loam; common fine pores; strongly acid.

Range in Characteristics

Thickness of the solum: 60 to more than 80 inches

Thickness of the sandy epipedon: 14 to 20 inches

Plinthite: 5 to 18 percent between a depth of 28 and 60 inches

Rock fragments: 0 to 5 percent, by volume, ironstone nodules in the A and E horizons and the upper part of the B horizon

Reaction: Very strongly acid to moderately acid throughout the profile

A or Ap horizon:

Color—hue of 10YR, value of 4 to 6, and chroma of 2 to 4

Texture—loamy sand

E horizon:

Color—hue of 2.5Y or 10YR, value of 5 or 6, and chroma of 4 to 6

Texture—loamy sand

Bt horizon:

Color—hue of 2.5Y or 10YR, value of 5 to 7, and chroma of 4 to 8

Texture—sandy loam or sandy clay loam

Redoximorphic features—few or common masses of oxidized iron in shades of brown or yellow

Btv horizon:

Color—hue of 2.5Y or 10YR, value of 5 to 7, and chroma of 4 to 8

Redoximorphic features—common or many masses of oxidized iron in shades of red, brown, or yellow and iron depletions in shades of gray

Bt´ horizon (if it occurs):

Color—hue of 2.5Y or 10YR, value of 4 to 6, and chroma of 2 to 8

Texture—sandy clay loam

Redoximorphic features—few to many masses of oxidized iron in shades of red, brown, or yellow and iron depletions in shades of gray

BC horizon:

Color—hue of 2.5YR to 10YR, value of 4 to 8, and chroma of 2 to 8

Texture—sandy loam or sandy clay loam

Redoximorphic features—common or many masses of oxidized iron in shades of red, brown, or yellow and iron depletions in shades of gray

Echaw Series

Landform: Flats on marine terraces
Parent material: Sandy marine deposits
Drainage class: Moderately well drained
Permeability: Moderately rapid
Depth class: Very deep
Slope range: 0 to 2 percent
Commonly associated soils: Centenary, Chipley, Leon, Ridgeland, and Rigdon
Taxonomic classification: Sandy, siliceous, thermic Oxyaquic Alorthods

Typical Pedon

Echaw sand in an area of Echaw-Centenary complex, 0 to 2 percent slopes; about 1.0 mile northwest on Old Louisville Road from its intersection with GA Highway 119, about 4.1 miles west on Old River Road, 100 feet north of the road; in Effingham County, Georgia; Guyton, GA 7.5-minute topographic quadrangle; lat. 32 degrees 20 minutes 03 seconds N. and long. 81 degrees 20 minutes 22 seconds W.

Ap—0 to 11 inches; grayish brown (10YR 5/2) sand; single grain; loose; many fine and few medium roots; strongly acid; clear smooth boundary.
E1—11 to 24 inches; light yellowish brown (10YR 6/4) sand; single grain; loose; common fine and few roots; strongly acid; gradual smooth boundary.
E2—24 to 36 inches; light yellowish brown (10YR 6/4) loamy fine sand; weak fine granular structure; common uncoated sand grains; common medium distinct light gray (10YR 7/2) iron depletions; common fine roots; very strongly acid; clear smooth boundary.
E3—36 to 45 inches; light gray (10YR 7/2) sand; single grain; loose; common fine faint pale brown (10YR 6/3) iron depletions; very strongly acid; clear smooth boundary.
Bh1—45 to 57 inches; dark brown (7.5YR 3/2) sand; single grain; loose; common uncoated sand grains; few fine roots; very strongly acid; gradual smooth boundary.
Bh2—57 to 80 inches; dark reddish brown (5YR 3/2) sand; single grain; loose; few uncoated sand grains; very strongly acid.

Range in Characteristics

Thickness of the solum: 60 inches or more
Depth to the top of the Bh horizon: 31 to 50 inches
Reaction: Very strongly acid to moderately acid

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 1 to 3
Texture—sand or fine sand

E horizon:
Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 3 to 6
Texture—sand, fine sand, or loamy fine sand
Redoximorphic features—few to many masses of oxidized iron in shades of red, yellow, or brown and few to many iron depletions in shade gray

Bh horizon:
Color—hue of 7.5YR or 5YR, value of 2 or 3, and chroma of 1 or 2
Texture—sand, fine sand, loamy sand, or loamy fine sand

Eulonia Series

Landform: Stream terraces
Parent material: Clayey fluviomarine deposits
Drainage class: Moderately well drained
Permeability: Moderately slow
Depth class: Very deep
Slope range: 0 to 3 percent
Commonly associated soils: Bladen, Chastain, and Tawcaw
Taxonomic classification: Fine, mixed, subactive, thermic Aquic Hapludults

Typical Pedon

Eulonia sandy loam, 0 to 3 percent slopes; about 2.1 miles east on Chimney Road from its intersection with GA Highway 21 in Rincon, 1.8 miles south on Old Augusta Road, 0.8 mile east along an improved woods road, in a cultivated field; in Effingham County, Georgia; Port Wentworth, GA-SC 7.5-minute topographic quadrangle; lat. 32 degrees 14 minutes 56 seconds N. and long. 81 degrees 11 minutes 10 seconds W.

Ap—0 to 8 inches; brown (10YR 4/3) sandy loam; weak fine granular structure; very friable; many fine roots; few fine pores; strongly acid; abrupt smooth boundary.

E—8 to 13 inches; light yellowish brown (10YR 6/4) sandy loam; weak medium granular structure; very friable; common fine and medium roots; few fine pores; strongly acid; clear smooth boundary.

Bt1—13 to 24 inches; red (2.5YR 4/6) sandy clay; moderate medium subangular blocky structure; friable; common faint clay films on faces of peds; few fine prominent strong brown (7.5YR 5/8) masses of oxidized iron; common fine roots; common fine and medium pores; strongly acid; clear smooth boundary.

Bt2—24 to 34 inches; red (2.5YR 4/6) clay; strong medium subangular blocky structure; firm; common faint clay films on faces of peds; few fine flakes of mica; common medium faint yellowish red (5YR 4/6) and common fine prominent strong brown (7.5YR 5/8) masses of oxidized iron; common medium prominent light brownish gray (10YR 6/2) iron depletions; few fine roots; common fine and medium pores; strongly acid; clear wavy boundary.

Btg—34 to 44 inches; grayish brown (10YR 5/2) sandy clay; moderate medium subangular blocky structure; firm; common faint clay films on faces of peds; common fine flakes of mica; many medium prominent red (2.5YR 4/6), common medium prominent yellowish red (5YR 4/6), and common fine prominent strong brown (7.5YR 5/8) masses of oxidized iron; few fine roots; few fine pores; strongly acid; clear wavy boundary.

BCg—44 to 60 inches; grayish brown (10YR 5/2) sandy clay loam; weak medium subangular blocky structure; friable; common fine flakes of mica; many medium prominent red (2.5YR 5/6), common fine prominent strong brown (7.5YR 5/8), and few medium prominent yellowish brown (10YR 5/6) masses of oxidized iron; strongly acid; gradual wavy boundary.

C—60 to 80 inches; 25 percent red (2.5YR 5/8), 25 percent strong brown (7.5YR 5/8), 25 percent yellowish brown (10YR 5/6), and 25 percent grayish brown (10YR 5/2) sandy clay loam; massive; very friable; many fine flakes of mica; strongly acid.

Range in Characteristics

Thickness of the solum: 39 to 55 inches
Thickness of the sandy epipedon: 5 to 19 inches
Rock fragments: 0 to 5 percent, by volume, rounded quartz fragments throughout most pedons

Reaction: Very strongly acid to slightly acid in the A horizon and upper part of the B horizon and very strongly acid to moderately acid in the lower part of the B horizon and in the C horizon
Other features: Few to many fine flakes of mica are in the B and C horizons of most pedons

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 3 to 6, and chroma of 0 to 3
Texture—fine sandy loam, sandy loam, loamy fine sand, or loamy sand

E horizon:
Color—hue of 10YR to 5Y, value of 5 to 7, and chroma of 1 to 4
Texture—fine sandy loam, sandy loam, loamy fine sand, or loamy sand
Redoximorphic features—none to common masses of oxidized iron in shades of red, yellow, or brown

Bt horizon:
Color—hue of 2.5YR to 2.5Y, value of 4 to 7, and chroma of 3 to 8; the lower part of horizon is mottled without dominant matrix hue in some pedons
Texture—clay, sandy clay, or clay loam
Redoximorphic features—masses of oxidized iron in shades of red, yellow, or brown and iron depletions in shades of gray

Btg horizon:
Color—horizon has hue of 2.5YR to 2.5Y, value of 4 to 7, and chroma of 1 or 2 or is mottled without dominant matrix hue
Texture—sandy clay or sandy clay loam
Redoximorphic features—masses of oxidized iron in shades of red, yellow, or brown and iron depletions in shades of gray

BCg horizon:
Color—horizon has hue of 2.5YR to 2.5Y, value of 4 to 7, and chroma of 1 or 2 or is mottled without dominant matrix hue
Texture—sandy clay or sandy clay loam
Redoximorphic features—masses of oxidized iron in shades of red, yellow, or brown

C horizon:
Color—hue of 2.5YR to 2.5Y, value of 4 to 7, and chroma of 1 to 8 or mottled without dominant matrix hue
Texture—sandy loam or sandy clay loam
Redoximorphic features—masses of oxidized iron in shades of red, yellow, or brown

Foxworth Series

Landform: Flats on marine terraces
Parent material: Sandy marine deposits
Drainage class: Moderately well drained to somewhat excessively drained
Permeability: Very rapid
Depth class: Very deep
Slope range: 0 to 2 percent
Commonly associated soils: Blanton, Bonifay, Centenary, Chipley, and Meldrim
Taxonomic classification: Thermic, coated Typic Quartzipsamments

Typical Pedon

Foxworth sand, 0 to 2 percent slopes; about 3.25 miles west of Guyton along GA Highway 119 from its intersection with U.S. Highway 17, about 200 feet north of the

road; in Effingham County, Georgia; Guyton GA 7.5-minute topographic quadrangle; lat. 32 degrees 18 minutes 27 seconds N. and long. 81 degrees 25 minutes 15 seconds W.

Ap—0 to 8 inches; very dark grayish brown (10YR 3/2) sand; single grain; loose; many fine roots; moderately acid; clear wavy boundary.
C1—8 to 35 inches; dark yellowish brown (10YR 4/6) sand; single grain; loose; common fine and common medium prominent white (10YR 8/1) streaks of uncoated sand grains; common fine roots; moderately acid; gradual wavy boundary.
C2—35 to 47 inches; yellowish brown (10YR 5/6) sand; single grain; loose; common fine and common medium prominent white (10YR 8/1) streaks of uncoated sand grains; common fine roots; moderately acid; gradual wavy boundary.
C3—47 to 57 inches; yellowish brown (10YR 5/6) sand; single grain; loose; common fine and common medium prominent white (10YR 8/1) streaks of uncoated sand grains; common medium distinct light yellowish brown (10YR 6/4) and common medium prominent strong brown (7.5YR 5/6) masses of oxidized iron; few fine roots; moderately acid; gradual wavy boundary.
C4—57 to 69 inches; very pale brown (10YR 7/4) sand; single grain; loose; common fine and common medium prominent white (10YR 8/1) streaks of uncoated sand grains; common medium prominent yellowish brown (10YR 5/6) masses of oxidized iron and common medium prominent light gray (10YR 7/2) iron depletions; few fine roots; moderately acid; gradual wavy boundary.
Cg—69 to 80 inches; light gray (10YR 7/2) sand; single grain; loose; common medium faint very pale brown (10YR 7/3) and common medium distinct yellowish brown (10YR 5/6) masses of oxidized iron; few fine roots; moderately acid.

Range in Characteristics

Thickness of sandy material: 80 inches or more
Reaction: Very strongly acid to slightly acid throughout the profile, except for the surface layer in limed areas

A or Ap horizon:
Color—hue of 7.5YR to 2.5Y, value of 3 to 5, and chroma of 1 to 3
Texture—sand or fine sand

C horizon:
Color—hue of 7.5YR to 2.5Y, value of 5 to 7, and chroma of 3 to 8
Texture—sand or fine sand
Redoximorphic features—common or many iron depletions in shades of brown or gray and masses of oxidized iron in shades of brown or red

Cg horizon:
Color—hue of 10YR or 2.5Y, value of 5 to 8, and chroma of 1 or 2
Texture—sand or fine sand
Redoximorphic features—common iron depletions in shades of brown and masses of oxidized iron in shades of brown or red

Fuquay Series

Landform: Broad interstream divides on marine terraces
Parent material: Loamy and sandy marine deposits
Drainage class: Well drained
Permeability: Slow
Depth class: Very deep
Slope range: 0 to 5 percent

Commonly associated soils: Blanton, Bonifay, Bonneau, Clarendon, Dothan, Meldrim, Leefield, and Stilson
Taxonomic classification: Loamy, kaolinitic, thermic Arenic Plinthic Kandiudults

Typical Pedon

Fuquay loamy sand, 0 to 2 percent slopes; about 0.1 mile west on GA Highway 21 Spur from its intersection with GA Highway 119, about 7.0 miles north on Old Dixie Highway, 1.2 miles on Springfield Road, 200 feet east of the road; in Effingham County, Georgia; Springfield North, GA 7.5-minute topographic quadrangle; lat. 32 degrees 29 minutes 03 seconds N. and long. 81 degrees 22 minutes 22 seconds W.

A—0 to 9 inches; very dark grayish brown (10YR 4/3) loamy sand; weak fine granular structure; very friable; many fine and common medium roots; strongly acid; clear smooth boundary.
E—9 to 28 inches; yellowish brown (10YR 5/4) loamy sand; weak fine granular structure; very friable; common fine and few coarse roots; strongly acid; gradual wavy boundary.
Bt1—28 to 38 inches; yellowish brown (10YR 5/6) sandy loam; weak fine subangular blocky structure; friable; strongly acid; gradual wavy boundary.
Bt2—38 to 44 inches; yellowish brown (10YR 5/6) sandy clay loam; weak medium subangular blocky structure; friable; few fine distinct strong brown (7.5YR 5/8) masses of oxidized iron; strongly acid; gradual wavy boundary.
Btv1—44 to 56 inches; yellowish brown (10YR 5/6) sandy clay loam; weak medium subangular blocky structure; friable; 7 percent nodular plinthite; many medium distinct strong brown (7.5YR 5/8) masses of oxidized iron; very strongly acid; gradual wavy boundary.
Btv2—56 to 63 inches; pale brown (10YR 6/3) sandy clay loam; weak medium subangular blocky structure; friable; 5 percent nodular plinthite; common medium prominent yellowish red (5YR 5/8) and few fine prominent yellowish brown (10YR 5/8) masses of oxidized iron and common medium gray (10YR 6/1) iron depletions; very strongly acid; gradual wavy boundary.
BC—63 to 80 inches; 40 percent light gray (10YR 6/2), 40 percent yellowish brown (10YR 5/8), and 20 percent yellowish red (5YR 5/8) sandy loam; massive; firm; very strongly acid.

Range in Characteristics

Thickness of the solum: 60 inches or more
Thickness of sandy material: 21 to 38 inches
Plinthite: 5 to 15 percent between a depth of 26 and 60 inches
Rock fragments: 0 to 5 percent, by volume, ironstone nodules
Reaction: Extremely acid to moderately acid

A or Ap horizon:
Color—hue of 10YR, value of 3 to 5, and chroma of 2 or 3
Texture—sand or loamy sand

E horizon:
Color—hue of 2.5YR or 10YR, value of 5 to 7, and chroma of 2 to 6
Texture—sand or loamy sand

Bt horizon:
Color—hue of 7.5YR to 2.5Y, value of 5 or 6, and chroma of 5 to 8
Texture—sandy loam or sandy clay loam
Redoximorphic features—few or common masses of oxidized iron in shades of brown and yellowish red

Btv horizon:
Color—hue of 5YR to 2.5Y, value of 5 to 7, and chroma of 1 to 8
Texture—sandy loam and sandy clay loam
Redoximorphic features—common iron depletions in shades of gray and common masses of oxidized iron in shades of red, yellow, or brown

Bt´ horizon:
Color—hue of 10YR to 2.5Y, value of 5 or 6, and chroma of 4 to 6
Texture—sandy clay loam
Redoximorphic features—common iron depletions in shades of gray and common masses of oxidized iron in shades of brown

BC horizon:
Color—hue of 10YR or 2.5Y, value of 6, and chroma of 2
Texture—sandy loam to sandy clay loam
Redoximorphic features—common masses of oxidized iron in shades of brown

Leefield Series

Landform: Marine terraces
Parent material: Loamy and sandy marine deposits
Drainage class: Somewhat poorly drained
Permeability: Moderately slow
Depth class: Very deep
Slope range: 0 to 2 percent
Commonly associated soils: Albany, Ocilla, Pelham, and Stilson
Taxonomic classification: Loamy, siliceous, subactive, thermic Arenic Plinthaquic Paleudults

Typical Pedon

Leefield loamy sand, 0 to 2 percent slopes; about 4.1 miles north on Old Louisville Road from its intersection with GA Highway 119, about 600 feet west on a field road, in a cultivated field; in Effingham County, Georgia; Guyton, GA 7.5-minute topographic quadrangle; lat. 32 degrees 30 minutes 54 seconds N. and long. 81 degrees 26 minutes 30 seconds W.

A—0 to 10 inches; very dark grayish brown (10YR 3/2) loamy sand; weak fine granular structure; very friable; many fine roots; moderately acid; abrupt smooth boundary.
E1—10 to 24 inches; light yellowish brown (10YR 6/4) loamy sand; weak fine granular structure; very friable; common fine roots; common medium distinct strong brown (7.5YR 5/6) and common fine distinct yellowish brown (10YR 5/6) masses of oxidized iron; moderately acid; clear smooth boundary.
E2—24 to 29 inches; light yellowish brown (10YR 6/4) loamy sand; weak fine granular structure; very friable; few fine roots; common medium prominent strong brown (7.5YR 5/6) and common medium distinct yellowish brown (10YR 5/6) masses of oxidized iron and common medium distinct light gray (10YR 7/2) iron depletions; strongly acid; clear smooth boundary.
Bt—29 to 34 inches; light yellowish brown (10YR 6/4) sandy loam; weak fine granular structure; very friable; few fine roots; common medium prominent strong brown (7.5YR 5/8) and common medium distinct yellowish brown (10YR 5/6) masses of oxidized iron and common medium distinct light gray (10YR 7/2) iron depletions; strongly acid; clear smooth boundary.
Btv—34 to 41 inches; yellowish brown (10YR 5/4) sandy clay loam; weak medium subangular blocky structure; friable; few fine roots; 10 percent nodular plinthite;

few fine faint clay films of faces of peds; common medium prominent yellowish red (5YR4/8) and strong brown (7.5YR 5/6) masses of oxidized iron and common medium distinct light brownish gray (10YR 6/2) iron depletions; strongly acid; gradual wavy boundary.

Btgv—41 to 53 inches; light brownish gray (10YR 6/2) sandy clay loam; moderate medium subangular blocky structure; friable; few fine roots; 12 percent platy plinthite; few fine faint clay films of faces of peds; few fine pores; common medium prominent red (2.5YR 5/8) and common medium prominent yellowish brown (10YR5/6) masses of oxidized iron; strongly acid; gradual wavy boundary.

B´t—53 to 71 inches; reticulate mottled red (2.5YR4/8), strong brown (7.5YR 5/6), light yellowish brown (10YR 6/4), and light brownish gray (10YR 6/2) sandy clay loam; moderate medium subangular blocky structure; firm; few fine roots; few medium distinct clay films on faces of peds; common fine pores; strongly acid; gradual wavy boundary.

BC—71 to 80 inches; reticulate mottled red (2.5YR 5/6), yellowish red (5YR 5/8) strong brown (7.5YR 4/8), light yellowish brown (10YR 4/6), and light brownish gray (10YR6/2) sandy clay loam; weak medium subangular blocky structure; friable; common fine pores; strongly acid.

Range in Characteristics

Thickness of the solum: 65 inches or more
Thickness of the sandy epipedon: 21 to 38 inches
Plinthite: 5 to 15 percent between a depth of 22 and 60 inches
Rock fragments: 0 to 3 percent, by volume, ironstone nodules
Reaction: Strongly acid or moderately acid

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 3 or 4, and chroma of 2 or 3
Texture—sand or loamy sand

E horizon:
Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 2 to 4
Texture—sand or loamy sand

Bt horizon:
Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 4 to 8
Texture—sandy loam or sandy clay loam
Redoximorphic features—none to common masses of oxidized iron in shades of red, brown, or yellow and none to common iron depletions in shades of gray

Btv horizon:
Color—hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 4 to 6
Texture—sandy loam or sandy clay loam
Redoximorphic features—common masses of oxidized iron in shades of red, yellow, or brown and common or many iron depletions in shades of gray

Btgv horizon:
Color—hue of 10YR or 2.5Y, value of 6, and chroma of 1 or 2
Texture—sandy loam to sandy clay loam
Redoximorphic features—common masses of oxidized iron in shades of red, yellow, or brown

Btg horizon:
Color—hue of 10YR or 2.5Y, value of 6 or 7, and chroma of 1 or 2
Texture—sandy clay loam
Redoximorphic features—common masses of oxidized iron in shades of red, yellow, or brown

B´t horizon:
Color—hue of 7.5YR, value of 5, and chroma of 8
Texture—sandy clay loam
Redoximorphic features—common masses of oxidized iron in shades of olive and common iron depletions in shades of gray

BC horizon:
Color—hue of 7.5YR or 10YR, value of 5 to 7, and chroma of 1 to 8
Texture—sandy loam or sandy clay loam
Redoximorphic features—common masses of oxidized iron in shades of red, yellow, or brown and common iron depletions in shades of gray

Leon Series

Drainage class: Poorly drained
Permeability: Moderate
Depth class: Very deep
Slope range: 0 to 2 percent
Commonly associated soils: Boulogne, Centenary, Echaw, Mascotte, Pelham, Pinckney, and Ridgeland
Taxonomic classification: Sandy, siliceous, thermic Aeric Alaquods

Typical Pedon

Leon sand, 0 to 2 percent slopes; about 2.25 miles east from the intersection of U.S. Highway 17 and Blue Jay Road, 0.5 mile northwest on Marlow Road, 0.4 mile northeast along a power line; in Effingham County, Georgia; Meldrim NW, GA 7.5-minute topographic quadrangle; lat. 32 degrees 14 minutes 31 seconds N. and long. 81 degrees 19 minutes 17 seconds W.

A—0 to 8 inches; very dark gray (10YR 2/1) sand; weak fine granular structure; very friable; many fine and common medium roots; moderately acid; clear smooth boundary.
Eg—8 to 15 inches; light brownish gray (10YR 6/2) sand; single grain; loose; common fine roots; clear wavy boundary.
Bh1—15 to 18 inches; very dark brown (10YR 2/2) sand; weak fine granular structure; friable; common fine roots; very strongly acid; gradual wavy boundary.
Bh2—18 to 24 inches; dark reddish brown (5YR 3/3) sand; weak fine granular structure; friable; common fine roots; very strongly acid; gradual wavy boundary.
Eg´—24 to 33 inches; light brownish gray (2.5Y 6/2) sand; single grain; loose; common medium distinct very pale brown (10YR 7/4) masses of oxidized iron; few fine roots; very strongly acid; gradual wavy boundary.
B´h1—33 to 42 inches; dark brown (7.5YR 3/2) sand; weak fine granular structure; friable; common medium prominent pale brown (10YR 6/3) masses of oxidized iron; few fine roots; very strongly acid; gradual wavy boundary.
B´h2—42 to 80 inches; dark reddish brown (5YR 3/2) sand; weak fine granular structure; friable; few fine roots; very strongly acid.

Range in Characteristics

Thickness of the solum: Greater than 80 inches
Depth to the top of the Bh horizon: 5 to 30 inches
Reaction: Extremely acid to slightly acid, except for surface layer in lime areas

A horizon:
Color—hue of 7.5YR or 10YR, value of 2 to 4, and chroma of 1 or 2
Texture—sand or fine sand

E horizon:
Color—hue of 7.5YR or 2.5Y, value of 4 to 8, and chroma of 1 or 2
Texture—sand or fine sand

Bh horizon:
Color—hue of 5YR to 10YR, value of 2 to 4, and chroma of 1 or 4
Texture—sand, fine sand, loamy sand, or loamy fine sand

E´ horizon:
Color—hue of 7.5YR to 2.5Y, value of 4 to 8, and chroma of 1 to 3
Texture—sand or fine sand

B´h horizon:
Color—hue of 5YR to 10YR, value of 2 to 4, and chroma of 1 to 4
Texture—sand, fine sand, loamy sand, or loamy fine sand
Redoximorphic features—common masses of oxidized iron in shades of brown in the upper part of the horizon

Cg horizon (if it occurs):
Color—hue of 7.5YR to 2.5Y, value of 4 to 8, and chroma of 1 or 2
Texture—sand or fine sand

Levy Series

Landform: Tidal inlets
Parent material: Silty and clayey alluvium
Drainage class: Very poorly drained
Permeability: Very slow
Depth class: Very deep
Slope range: 0 to 2 percent
Commonly associated soils: Chastain and Tawcaw
Taxonomic classification: Fine, mixed, superactive, acid, thermic Typic Hydraquents

Typical Pedon

Levy silty clay loam, 0 to 2 percent slopes; about 2.1 miles east on Chimney Road from its intersection with GA Highway 21, about 1 mile north on Old Augusta Road, 2.5 miles south on an unimproved woods road, 100 feet east of the road; in Effingham County, Georgia; Rincon, GA 7.5-minute topographic quadrangle; lat. 32 degrees 16 minutes 12 seconds N. and long 81 degrees 09 minutes 46 seconds W.

A—0 to 4 inches; brown (10YR 4/3) silty clay loam; massive; very sticky; many medium prominent strong brown (7.5YR 5/6) and distinct yellowish brown (10YR 5/6) masses of oxidized iron and distinct gray (10YR 6/1) iron depletions; many medium and fine roots; extremely acid; abrupt wavy boundary.

Cg1—4 to 32 inches; gray (10YR 6/1) silty clay; massive; moderately fluid; very sticky; many medium prominent strong brown (7.5YR 5/6) and distinct yellowish brown (10YR 5/6) masses of oxidized iron and distinct gray (10YR 6/1) iron depletions; many medium and fine roots; very strongly acid; abrupt wavy boundary.

Cg2—32 to 60 inches; dark bluish gray (5B 4/1) silty clay; massive; sticky; moderately fluid; many medium prominent strong brown (7.5YR 5/6) and distinct yellowish brown (10YR 5/6) masses of oxidized iron and distinct gray (10YR 6/1) iron depletions; many fine roots; moderately acid; abrupt wavy boundary.

Cg3—60 to 80 inches; dark gray (10YR 4/1) sand; massive; many medium prominent strong brown (7.5YR 5/6) and distinct yellowish brown (10YR 5/6) masses of oxidized iron and distinct gray (10YR 6/1) iron depletions; moderately acid.

Range in Characteristics

Reaction: Extremely acid to strongly acid in water between the surface and a depth of about 40 inches; very strongly acid to mildly alkaline below a depth of about 40 inches

A horizon:
Color—hue of 10YR, value of 3 to 5, and chroma of 2 or 3
Texture—silt loam or silty clay loam or the mucky analogs of these textures
Redoximorphic features (if they occur)—masses of oxidized iron in shades of red, yellow, or brown and iron depletions in shades of brown, yellow, olive, or gray

Cg horizon (to depth of 40 inches, or more):
Color—hue of 10YR, 2.5Y, 5Y, or 5G; value of 4 to 6; and chroma of 1 or 2
Texture—clay or silty clay
Redoximorphic features (if they occur)—masses of oxidized iron in shades of red, yellow, or brown and iron depletions in shades of brown, yellow, olive, or gray

Cg horizon (below a depth of 40 inches, in some pedons):
Color—hue of 10YR, 2.5Y, 5Y, 5GY, or 5G; value of 4 to 6; and chroma of 1 or 2
Texture—sand, silt loam, silty clay loam, or silty clay
Redoximorphic features (if they occur)—masses of oxidized iron in shades of red, yellow, or brown and iron depletions in shades of brown, yellow, olive, or gray

Mascotte Series

Landform: Flats on marine terraces
Parent material: Loamy and sandy marine deposits
Drainage class: Poorly drained
Permeability: Moderately slow
Depth class: Very deep
Slope range: 0 to 2 percent
Commonly associated soils: Boulogne, Leon, Pelham, Pickney, Rains, Ridgeland, Rigdon, and Surrency
Taxonomic classification: Sandy over loamy, siliceous, active, thermic Ultic Alaquods

Typical Pedon

Mascotte sand, 0 to 2 percent slopes; about 1.9 miles southwest of Rincon on Blanford Road, 0.7 mile east on McCall Road, 1.6 miles north on an unimproved woods road; in Effingham County, Georgia; Rincon, GA-SC 7.5-minute topographic quadrangle; lat. 32 degrees 15 minutes 45 seconds N. and long. 81 degrees 14 minutes 11 seconds W.

A—0 to 9 inches; black (10YR 2/1) sand; single grain; loose; many fine and few medium roots; very strongly acid; clear smooth boundary.
Eg—9 to 15 inches; gray (10YR 5/1) sand; single grain; loose; common fine roots; very strongly acid; clear smooth boundary.
Bh1—15 to 23 inches; dark reddish brown (5YR 2.5/2) sand; single grain; loose; few fine roots; very strongly acid; gradual smooth boundary.
Bh2—23 to 26 inches; brown (7.5YR 4/4) sand; single grain; loose; few fine roots; very strongly acid; gradual smooth boundary.
Bh3—26 to 37 inches; dark reddish brown (5YR 2.5/2) sand; single grain; loose; few fine roots; very strongly acid; gradual smooth boundary.
Btg1—37 to 57 inches; light brownish gray (10YR 6/2) sandy clay loam; weak medium

subangular blocky structure; moderately friable; few faint clay films on faces of peds; few fine roots; very strongly acid; gradual wavy boundary.

Btg2—57 to 70 inches; grayish brown (10YR 5/2) sandy loam; weak fine subangular blocky structure; friable; few faint clay films on faces of peds; many medium prominent yellowish brown (10YR 5/6) masses of oxidized iron; extremely acid; gradual wavy boundary.

Btg3—70 to 80 inches; light gray (10YR 7/2) sandy loam; weak fine subangular blocky structure; moderately friable; few faint clay films on faces of peds; many medium faint light brownish gray (10YR 6/2) iron depletions; extremely acid.

Range in Characteristics

Thickness of the solum: 56 inches or more
Thickness of the sandy epipedon: 26 to 40 inches
Depth to the top of the Bh horizon: 9 to 22 inches
Reaction: Extremely acid to strongly acid, except for surface layer in limed areas

A or Ap horizon:
Color—hue of 10YR, value of 2 or 3, and chroma of 1
Texture—fine sand or sand

E horizon:
Color—hue of 10YR, value of 5 to 7, and chroma of 1 or 2
Texture—fine sand or sand
Redoximorphic features—none to common masses of oxidized iron in shades of brown or yellow

Bh horizon:
Color—hue of 5YR or 7.5YR and value and chroma of 2 to 4
Texture—fine sand, sand, or loamy sand

E´ horizon (if it occurs):
Color—hue of 10YR, value of 5 to 7, and chroma of 2 to 4
Texture—fine sand or sand
Redoximorphic features—few to many masses of oxidized iron in shades of brown or yellow and iron depletions in shades of gray

Btg horizon:
Color—hue of 10YR, value of 5 to 7, and chroma of 1 or 2
Texture—sandy loam, fine sandy loam, or sandy clay loam
Redoximorphic features—few to many masses of oxidized iron in shades of brown, yellow, or red

Cg horizon (if it occurs):
Color—hue of 10YR, value of 5 to 7, and chroma of 1 or 2
Texture—fine sand or sand

Meldrim Series

Landform: Flats on marine terraces
Parent material: Loamy and sandy marine deposits
Drainage class: Moderately well drained
Permeability: Moderately slow
Depth class: Very deep
Slope range: 0 to 5 percent
Commonly associated soils: Albany, Blanton, Chipley, Foxworth, and Fuquay
Taxonomic classification: Loamy, siliceous, semiactive, thermic Oxyaquic Paleudults

Typical Pedon

Meldrim sand, 0 to 5 percent slopes; about 1.3 miles from the intersection of U.S. Highway 80 and GA Highway 17 in Faulkville on GA Highway 17, about 600 feet west of the highway, along a woods road; in Effingham County, Georgia; Meldrim, GA 7.5-minute topographic quadrangle; lat. 32 degrees 09 minutes 07 seconds N. and long. 81 degrees 20 minutes 09 seconds W.

A—0 to 5 inches; very dark grayish brown (10YR 3/2) sand; single grain; loose; many fine and medium roots throughout; moderately acid; clear smooth boundary.

E1—5 to 19 inches; brownish yellow (10YR 6/6) sand; single grain; loose; many fine and few medium roots throughout; moderately acid; clear smooth boundary.

E2—19 to 37 inches; brownish yellow (10YR 6/6) sand; single grain; loose; few fine prominent strong brown (7.5YR 5/6) and common medium distinct yellowish brown (10YR 5/8) masses of oxidized iron; moderately acid; many very pale brown (10YR 8/3) uncoated sand grains; gradual wavy boundary.

E3—37 to 50 inches; yellow (10YR 7/6) sand; single grain; loose; common medium prominent yellowish red (5YR 5/8), common medium distinct strong brown (7.5YR 5/6), and common medium distinct yellowish brown (10YR 5/8) masses of oxidized iron; many medium prominent light gray (10YR 7/2) iron depletions; strongly acid; many very pale brown (10YR 8/2) uncoated sand grains; gradual wavy boundary.

BE—50 to 56 inches; light yellowish brown (10YR 6/4) loamy fine sand; weak fine granular structure; very friable; common medium prominent yellowish red (5YR 5/8), common medium distinct strong brown (7.5YR 5/6), and common medium distinct yellowish brown (10YR 5/6) masses of oxidized iron; many medium prominent light gray (10YR 7/2) iron depletions; strongly acid; common very pale brown (10YR 8/2) uncoated sand grains; gradual wavy boundary.

Bt—56 to 63 inches; light yellowish brown (10YR 6/4) sandy loam; weak medium subangular blocky structure; friable; 75 percent continuous clay bridges between sand grains; common medium prominent yellowish red (5YR 5/8) and common medium prominent strong brown (7.5YR 5/6) masses of oxidized iron and many medium prominent light gray (10YR 7/2) iron depletions; strongly acid; gradual wavy boundary

Btg—63 to 80 inches; light brownish gray (10YR 6/2) sandy clay loam; weak medium subangular blocky structure; friable; few discontinuous clay films on all faces of peds; 3 percent nodular plinthite; common medium prominent yellowish red (5YR 5/8) and common medium prominent strong brown (7.5YR 5/6) masses of oxidized iron and many medium prominent light gray (10YR 7/2) iron depletions; strongly acid.

Range in Characteristics

Thickness of the sandy material: 40 to 80 inches

Thickness of the solum: More than 60 inches

Content and size of rock fragments: 0 to 35, by volume, in the A and E horizons and 0 to 10 percent in the B horizon; mostly fine quartz gravel

Plinthite: Less than 5 percent above a depth of 60 inches; ranging from 0 to 15 percent between a depth of 60 and 80 inches

Reaction: Extremely acid to moderately acid, except for the surface layer in limed areas

A or Ap horizon:

Color—hue of 10YR or 2.5Y, value of 3 to 7, and chroma of 1 to 4; horizon is less than 10 inches thick where value is 3.5 or less

Texture—sand, fine sand, coarse sand, loamy sand, or loamy fine sand

E horizon:
Color—hue of 7.5YR to 2.5Y, value of 5 to 8, and chroma of 1 to 8
Texture—sand, fine sand, coarse sand, loamy sand, or loamy fine sand; horizon commonly has varying amounts of uncoated sand grains
Redoximorphic features—iron depletions or masses of reduced iron in shades of brown, yellow, or gray and masses of oxidized iron in shades of red, yellow, or brown

BE or EB horizon:
Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 3 to 8
Texture—loamy sand, loamy coarse sand, loamy fine sand, or sandy loam
Redoximorphic features—iron depletions or masses of reduced iron in shades of brown, yellow, or gray and masses of oxidized iron in shades of red, yellow, or brown

Bt or Btv horizon:
Color—horizon has hue of 7.5YR to 2.5Y, value of 5 to 7, and chroma of 3 to 8 or is variegated in shades of these colors
Texture—loamy sand, loamy coarse sand, loamy fine sand, sandy loam, fine sandy loam, or sandy clay loam
Redoximorphic features—iron depletions or masses of reduced iron in shades of brown, yellow, or gray and masses of oxidized iron in shades of red, yellow, or brown

Btg horizon:
Color—horizon has hue of 7.5YR to 5Y, value of 5 to 8, and chroma of 1 or 2 or is neutral in hue and has value of 4 to 8
Texture—sandy loam, fine sandy loam, or sandy clay loam; ranging to sandy clay below a depth of about 60 inches

Pelham Series

Landform: Depressions and drainageways
Parent material: Loamy alluvium
Drainage class: Poorly drained
Permeability: Moderate
Depth class: Very deep
Slope range: 0 to 2 percent
Commonly associated soils: Leefield, Leon, Mascotte, Rains, Rigdon, and Surrency
Taxonomic classification: Loamy, siliceous, subactive, thermic Arenic Paleaquults

Typical Pedon

Pelham loamy sand, 0 to 2 percent slopes; 3.4 miles southeast of Clyo along Clyo-Stillwell Road, 1.3 mile west on Sisters Ferry Road, 200 feet north of the road along an improved woods road; in Effingham County, Georgia; Springfield North, GA 7.5-minute topographic quadrangle; lat. 32 degrees 27 minutes 46 seconds N. and long. 81 degrees 26 minutes 34 seconds W.

Ap—0 to 6 inches; very dark gray (10YR 3/1) loamy sand; weak fine granular structure; very friable; many fine and medium roots; strongly acid; clear smooth boundary.
Eg1—6 to 18 inches; grayish brown (10YR 5/2) loamy sand; weak medium granular structure; very friable; common medium prominent yellowish brown (10YR 5/6) masses of oxidized iron; few medium faint gray (10YR 6/1) iron depletions; common fine and medium roots; strongly acid; clear wavy boundary.

Eg2—18 to 33 inches; light brownish gray (10YR 6/2) loamy sand; weak fine granular structure; friable; many faint light gray sand grains; few fine prominent brownish yellow (10YR 6/6) soft masses of oxidized iron; few medium roots; common medium roots; strongly acid; gradual wavy boundary.
Btg1—33 to 41 inches; gray (10YR 6/1) sandy loam; weak fine subangular blocky structure; friable; many sand grains bridged and coated with clay; many medium prominent brownish yellow (10YR 6/8) soft masses of oxidized iron throughout; strongly acid; gradual wavy boundary.
Btg2—41 to 66 inches; gray (10YR 6/1) sandy clay loam; moderate fine subangular blocky structure; friable; common pockets of sandy loam and common sand grains bridged and coated with clay; common coarse prominent strong brown (7.5YR 5/8) and brownish yellow (10YR 6/6) masses of oxidized iron; common fine faint light gray (10YR 7/1) iron depletions; strongly acid; gradual wavy boundary.
Cg—66 to 80 inches; light gray (10YR 7/1) sandy loam; massive; very friable; many medium prominent brownish yellow (10YR 6/6) masses of oxidized iron; very strongly acid.

Range in Characteristics

Thickness of the solum: More than 60 inches
Thickness of sandy material: 22 to 38 inches
Reaction: Extremely acid to strongly acid except for the surface layer in limed areas

A or Ap horizon:
Color—hue of 10YR to 5Y, value of 2 to 5, and chroma of 1 or 2
Texture—loamy fine sand, loamy sand, loamy coarse sand, fine sand, sand, or coarse sand

Eg horizon:
Color—hue of 10YR to 5Y, value of 4 to 7, and chroma of 1 or 2
Texture—loamy fine sand, loamy sand, loamy coarse sand, fine sand, sand, or coarse sand
Redoximorphic features—none to common masses of oxidized iron in shades of brown or yellow and iron depletions in shades of gray

Btg horizon:
Color—hue of 10YR to 5Y, value of 4 to 7, and chroma of 1 or 2
Texture—sandy clay loam, very fine sandy loam, fine sandy loam, sandy loam, or sandy clay
Redoximorphic features—few to many masses of oxidized iron in shades of red, brown, or yellow and none to many iron depletions in shades of gray

BCg horizon:
Color—hue of 10YR, value of 3 to 7, and chroma of 1 or 2
Texture—fine sandy loam, sandy loam, loamy sand, or sand
Redoximorphic features—few to many masses of oxidized iron in shades of red, brown or yellow and none to many depletions in shades of gray

Pickney Series

Landform: Depressions and drainageways
Parent material: Sandy alluvium
Drainage class: Very poorly drained
Permeability: Rapid
Depth class: Very deep
Slope range: 0 to 1 percent

Commonly associated soils: Boulogne, Mascotte, Leon, Ridgeland, Rigdon, and Surrency
Taxonomic classification: Sandy, siliceous, thermic Cumulic Humaquepts

Typical Pedon

Pickney mucky sand, 0 to 1 percent slopes, frequently flooded; about 3.9 miles south of Guyton on GA Highway 17, about 5.2 miles southeast from the intersection of GA Highway 17 and Midland Road, 100 feet north of the road; in Effingham County, Georgia; Meldrim, GA 7.5-minute topographic quadrangle; lat. 32 degrees 13 minutes 24 seconds N. and long. 81 degrees 19 minutes 03 seconds W.

A1—0 to 20 inches; black (10YR 2/1) mucky sand; weak fine granular structure; very friable; many fine and medium roots; few fine pores; strongly acid; clear smooth boundary.
A2—20 to 38 inches; very dark brown (10YR 2/2) loamy fine sand; weak fine granular structure; very friable; common fine and medium roots; very strongly acid; clear smooth boundary.
C1g—38 to 50 inches; grayish brown (10YR 5/2) loamy fine sand; weak fine granular structure; very friable; common uncoated sand grains; common fine and medium roots; very strongly acid; clear smooth boundary.
Cg2—50 to 65 inches; light brownish gray (10YR 6/2) sand; common medium faint white (10YR 8/1) mottles; single grain; loose; few fine roots; strongly acid; clear smooth boundary.
Cg3—65 to 80 inches; gray (10YR 5/1) sand; single grain; loose; moderately acid.

Range in Characteristics

Thickness of sandy material: 60 inches or more
Reaction: Extremely acid to moderately acid

A horizon:
Color—hue of 10YR, value of 2 or 3, and chroma of 1 or 2
Texture—sand, fine sand, loamy fine sand, or loamy sand; some pedons have mucky analogs of these textures

Cg horizon:
Color—hue of 10YR to 2.5Y, value of 3 to 7, and chroma of 1 or 2
Texture—sand, fine sand, loamy fine sand, or loamy sand
Redoximorphic features—none to common masses of oxidized iron in shades of red, yellow, or brown

Rains Series

Landform: Flats on marine terraces
Parent material: Loamy marine deposits
Drainage class: Poorly drained
Permeability: Moderate
Depth class: Very deep
Slope range: 0 to 2 percent
Commonly associated soils: Clarendon, Mascotte, Pelham, and Surrency
Taxonomic classification: Fine-loamy, siliceous, semiactive, thermic Typic Paleaquults

Typical Pedon

Rains loamy sand, 0 to 2 percent slopes; about 0.1 mile west of GA Highway 119 on Clyo-Kildare Road, 1.4 miles southwest on Clyo-Shawnee Road, 0.25 mile northeast of Clyo-Shawnee Road along an improved woods road; in Effingham County,

Georgia; Springfield North, GA 7.5-minute topographic quadrangle; lat. 32 degrees 29 minutes 17 seconds N. and long. 81 degrees 17 minutes 23 seconds W.

A—0 to 6 inches: very dark gray (10YR 3/1) loamy sand; weak fine granular structure; very friable; many fine and medium roots; strongly acid; clear smooth boundary.

Eg—6 to 18 inches; dark gray (10YR 4/1) loamy sand; weak medium granular structure; very friable; few fine faint gray (10YR 6/1) iron depletions; common fine and medium roots; many fine pores; strongly acid; clear wavy boundary.

Btg1—18 to 28 inches; grayish brown (10YR 5/2) sandy loam; weak fine subangular blocky structure; friable; common sand grains coated and bridged with clay; common medium prominent yellowish brown (10YR 5/6) masses of oxidized iron; few medium and fine roots; common fine pores; strongly acid; clear smooth boundary.

Btg2—28 to 50 inches; grayish brown (10YR 5/2) sandy clay loam; weak medium subangular blocky structure; friable; few faint clay films on faces of peds; common coarse prominent yellowish brown (10YR 5/6) masses of oxidized iron; common fine pores; strongly acid; gradual wavy boundary.

Btg3—50 to 60 inches; light brownish gray (10YR 6/2) sandy clay loam; moderate medium subangular blocky structure; friable; few faint clay films on faces of peds; common medium prominent strong brown (7.5YR 5/6) and common medium prominent yellowish brown (10YR 5/6) masses of oxidized iron; few fine roots; common fine pores; strongly acid; gradual wavy boundary.

Btg4—60 to 70 inches; gray (10YR 5/1) sandy clay loam; moderate medium subangular blocky structure; friable; few faint clay films on faces of peds; common medium prominent strong brown (7.5YR 5/6) and common medium prominent yellowish brown (10YR 5/6) masses of oxidized iron; strongly acid; gradual wavy boundary.

BCg—70 to 80 inches; gray (10YR 5/1) sandy clay; weak fine granular structure; friable; common medium prominent strong brown (7.5YR 5/6), common fine distinct dark yellowish brown (10YR 4/4), and common medium prominent yellowish brown (10YR 5/6) masses of oxidized iron; strongly acid.

Range in Characteristics

Thickness of the solum: 60 inches or more
Thickness of the sandy epipedon: 7 to 19 inches
Reaction: Extremely acid to strongly acid, except for the surface layer in limed areas

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 2 to 5, and chroma of 0 to 2
Texture—fine sandy loam, sandy loam, loamy fine sand, loamy sand, or sand

Eg horizon:
Color—hue of 10YR to 5Y, value of 4 to 7, and chroma of 0 to 2
Texture—fine sandy loam, sandy loam, loamy fine sand, loamy sand, or sand
Redoximorphic features—few or common masses of oxidized iron in shades of red, yellow, or brown

Btg horizon:
Color—hue of 10YR to 5Y, value of 4 to 7, and chroma of 1 or 2
Texture—sandy loam or sandy clay loam
Redoximorphic features—few or common masses of oxidized iron in shades of red, yellow, or brown

BCg horizon:
Color—hue of 10YR to 5Y, value of 5 to 7, and chroma of 1 or 2
Texture—sandy loam, fine sandy loam, sandy clay loam, or sandy clay

Redoximorphic features—few to many masses of oxidized iron in shades of red, yellow, or brown

Remlik Series

Landform: Escarpments
Parent material: Loamy and sandy marine deposits
Drainage class: Well drained
Permeability: Moderate
Depth class: Very deep
Slope range: 15 to 35 percent
Commonly associated soils: Blanton
Taxonomic classification: Loamy, kaolinitic, thermic Arenic Kanhapludults

Typical Pedon

Remlik loamy sand in an area of Remlik-Blanton complex, 15 to 60 percent slopes; about 0.5 mile south on Laurel Street from the intersection with GA Highway 119, about 9.4 miles east on Stillwell-Clyo Road, 2.3 miles north on Laurel Tree Road, 260 feet east of the road; in Effingham County, Georgia; Hardeeville, NW SC-GA 7.5-minute topographic quadrangle; lat. 32 degrees 28 minutes 42 seconds N. and long. 81 degrees 13 minutes 04 seconds W.

A—0 to 8 inches; very dark grayish brown (10YR 3/2) loamy sand; weak fine granular structure; very friable; many fine and medium roots; strongly acid; clear wavy boundary.
E—8 to 30 inches; yellowish brown (10YR 5/4) loamy sand; weak fine granular structure; very friable; common medium and few fine roots; strongly acid; clear smooth boundary.
Bt—30 to 57 inches; yellowish brown (10YR 5/4) sandy clay loam; weak medium subangular blocky structure; friable; few medium roots; strongly acid; clear smooth boundary.
BC—57 to 80 inches; yellowish brown (10YR 5/6) sandy loam; weak medium subangular blocky structure; friable; common fine prominent strong brown (7.5YR 5/6) masses of oxidized iron; common few distinct light brownish gray (10YR 6/2) iron depletions; strongly acid.

Range in Characteristics

Thickness of the solum: 30 to 60 inches or more
Thickness of sandy material: 20 to 40 inches
Reaction: Extremely acid to moderately acid, except for the surface layer in limed areas

A horizon:
Color—hue of 7.5YR to 2.5Y, value of 2 to 5, and chroma of 2 to 4
Texture—sand or loamy sand

E horizon:
Color—hue of 7.5YR to 2.5Y, value of 5 to 7, and chroma of 3 to 8
Texture—sand or loamy sand

BE horizon (if it occurs):
Color—hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 4 to 8
Texture—loamy sand or loamy fine sand

Bt horizon:
Color—hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 4 to 8 Texture—sandy loam or sandy clay loam

Redoximorphic features—masses of oxidized iron in shades of red or brown

BC horizon:
Color—hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 4 to 8 Texture—loamy sand, loamy fine sand, sandy loam, or fine sandy loam
Redoximorphic features—masses of oxidized iron in shades of red, yellow, or brown and iron depletions in shades of brown, white, or gray

C or 2C horizon (if it occurs):
Color—horizon has hue of 7.5YR or 10YR, value of 5 to 7, and chroma of 4 to 8 or is variegated in shades of these colors
Texture—sand, loamy sand, loamy fine sand, or sandy loam
Redoximorphic features—masses of oxidized iron in shades of red, yellow, or brown and iron depletions in shades of brown, white, or gray

Ridgeland Series

Landform: Flats on marine terraces
Parent material: Sandy marine deposits
Drainage class: Somewhat poorly drained
Permeability: Moderate
Depth class: Very deep
Slope range: 0 to 2 percent
Commonly associated soils: Albany, Boulogne, Centenary, Echaw, Leon, Mascotte, Pickney, and Rigdon
Taxonomic classification: Sandy, siliceous, thermic Oxyaquic Alorthods

Typical Pedon

Ridgeland sand, 0 to 2 percent slopes; about 1.8 miles west of Rincon on Blanford Road, 1.5 miles north on McCall Road, 1.0 mile west on Lowground Road, 200 feet south of the road; in Effingham County, Georgia; Springfield South, GA 7.5-minute topographic quadrangle; lat. 32 degrees 14 minutes 29 seconds N. and long. 81 degrees 20 minutes 11 seconds W.

A—0 to 6 inches; very dark gray (10YR 3/1) sand; weak fine granular structure; very friable; many fine and common medium roots; very strongly acid; clear smooth boundary.
Bh—6 to 11 inches; black (7.5YR 2.5/1) sand; weak fine granular structure; very friable; common fine and medium roots; strongly acid; clear smooth boundary.
E—11 to 25 inches; pale brown (10YR 6/3) sand; weak fine granular structure; very friable; few fine roots; strongly acid; gradual wavy boundary.
Eg1—25 to 36 inches; light brownish gray (10YR 6/2) sand; weak fine granular structure; very friable; few coarse prominent yellowish brown (10YR 5/6) and common medium distinct yellowish brown (10YR 5/4) masses of oxidized iron; few fine roots; strongly acid; gradual wavy boundary.
Eg2—36 to 43 inches; light brownish gray (10YR 6/2) sand; weak fine granular structure; very friable; few medium faint brown (10YR 5/3) masses of oxidized iron; few fine roots; strongly acid; gradual wavy boundary.
EB—43 to 54 inches; dark grayish brown (10YR 4/2) sand; massive; friable; few fine roots; strongly acid; gradual wavy boundary.
B´h—54 to 68 inches; black (7.5YR 2.5/1) sand; massive; friable; strongly acid; gradual wavy boundary.
E´B—68 to 80 inches; brown (10YR 4/3) sand; massive; friable; few medium distinct dark brown (7.5YR 3/2) pockets of spodic material and common medium faint light brownish gray (10YR 6/2) iron depletions; moderately acid.

Range in Characteristics

Thickness of the solum: 80 inches or more
Depth to the top of the Bh horizon: 4 to 9 inches
Reaction: Extremely acid to slightly acid, except for the surface layer in limed areas

A or Ap horizon:
Color—hue of 10YR or 2.5Y, value of 2 to 6, and chroma of 0 to 2
Texture—sand, fine sand, loamy sand, or loamy fine sand

Bh or B´h horizon:
Color—hue of 5YR, 7.5YR, or 10YR, value of 2 or 3, and chroma of 0 to 4
Texture—sand, fine sand, loamy sand, or loamy fine sand

E horizon:
Color—hue of 10YR or 2.5Y, value of 5 to 8, and chroma of 3 to 8
Texture—sand, fine sand, loamy sand, or loamy fine sand
Redoximorphic features—few to many in shades of gray or brown

Eg horizon:
Color—hue of 10YR or 2.5Y, value of 5 to 8, and chroma of 3 to 8
Texture—sand, fine sand, loamy sand, or loamy fine sand
Redoximorphic features—few to many in shades of gray or brown

EB horizon:
Color—hue of 10YR, value of 4, and chroma of 2 or 3
Texture—sand, fine sand, loamy sand, or loamy fine sand
Redoximorphic features—few or common masses of oxidized iron in shades of brown

Rigdon Series

Landform: Flats on marine terraces
Parent material: Loamy and sandy marine deposits
Drainage class: Somewhat poorly drained
Permeability: Moderate
Depth class: Very deep
Slope range: 0 to 2 percent
Commonly associated soils: Boulogne, Centenary, Echaw, Leefield, Leon, Mascotte, Pelham, Pickney, and Surrency
Taxonomic classification: Sandy, siliceous, thermic Oxyaquic Alorthods

Typical Pedon

Rigdon sand, 0 to 2 percent slopes; 1.25 miles south of Guyton along GA Highway 17 from the intersection of GA Highway 17 and GA Highway 119, about 0.6 mile east on Go Cart Road, 0.6 mile northwest on an unimproved woods road, 100 feet west of the road; in Effingham County, Georgia; Springfield North, GA 7.5-minute topographic quadrangle; lat. 32 degrees 17 minutes 54 seconds N. and long. 81 degrees 22 minutes 38 seconds W.

Ap—0 to 6 inches; black (10YR 2/1) sand; weak fine granular structure; very friable; many fine and common medium roots; very strongly acid; abrupt smooth boundary.

Bh—6 to 11 inches; dark brown (7.5YR 3/2) sand; massive in place, crushing to weak fine granular structure; friable; common medium faint dark reddish brown (5YR 3/3) masses of oxidized iron; common fine and few medium roots; very strongly acid; clear wavy boundary.

E1—11 to 20 inches; pale brown (10YR 6/3) sand; single grain; loose; common medium distinct brownish yellow (10YR 6/6) masses of oxidized iron; common fine and few medium roots; very strongly acid; gradual wavy boundary.
E2—20 to 36 inches; pale brown (10YR 6/3) sand; single grain; loose; common medium prominent brownish yellow (10YR 6/8) masses of oxidized iron; common medium faint light gray (10YR 7/2) iron depletions; very strongly acid; clear smooth boundary.
Btg1—36 to 49 inches; light brownish gray (10YR 6/2) sandy clay loam; weak fine subangular blocky structure; friable; sand grains bridged with clay; common medium prominent red (2.5YR 4/8) and yellowish brown (10YR 5/6) masses of oxidized iron; few fine and medium roots; very strongly acid; gradual wavy boundary.
Btg2—49 to 80 inches; light gray (10YR 7/1) sandy clay loam; weak fine subangular blocky structure; friable; sand grains bridged with clay; few faint clay films on faces of peds; common medium prominent dark red (2.5YR 3/6), strong brown (7.5YR 5/8), and yellowish brown (10YR 5/6) masses of oxidized iron; few fine and medium roots; very strongly acid.

Range in Characteristics

Thickness of the solum: 60 inches or more
Thickness of the sandy epipedon: 24 to 39 inches
Depth to the top of the Bh horizon: 5 to 13 inches
Reaction: Extremely acid to strongly acid, except for the surface layer in limed areas

A or Ap horizon:
Color—hue of 10YR or 5Y, value of 2 to 4, and chroma of 1 or 2
Texture—sand, fine sand, or loamy sand

E horizon:
Color—hue of 10YR to 5Y, value of 5 to 7, and chroma of 1 to 4
Texture—sand, fine sand, or loamy sand
Other features—horizon is less than 2 inches thick

Bh horizon:
Color—hue of 5YR or 7.5YR, value of 2 to 4, and chroma of 1 to 4
Texture—sand, fine sand, or loamy sand
Redoximorphic features—none to common masses of oxidized iron in shades of brown or yellow

E or E´ horizon:
Color—hue of 10YR to 5Y, value of 5 to 8, and chroma of 3 to 6; chroma of 1 or 2 occurs in lower part of horizon in some pedons
Texture—sand, fine sand, loamy sand, or loamy fine sand
Redoximorphic features—few to many masses of oxidized iron in shades of red, yellow, or brown and iron depletions in shades of pale brown or gray

Btg horizon:
Color—hue of 10YR or 2.5Y, value of 6 or 7, and chroma of 1 or 2
Texture—sandy clay loam, sandy loam, or fine sandy loam
Redoximorphic features—few to many masses of oxidized iron in shades of red, brown, or yellow and iron depletions in shades of pale brown or gray

Stilson Series

Landform: Flats on marine terraces
Parent material: Loamy and sandy marine deposits

Drainage class: Moderately well drained
Permeability: Moderate
Depth class: Very deep
Slope range: 0 to 2 percent
Commonly associated soils: Clarendon, Dothan, and Leefield
Taxonomic classification: Loamy, siliceous, subactive, thermic Arenic Plinthic Paleudults

Typical Pedon

Stilson loamy sand, 0 to 2 percent slopes; about 2.4 miles southeast on Leola Road from the intersection of GA Highway 21 and Leola Road, 600 feet north of the road in a cultivated field, about 10 feet from the field border; in Screven County, Georgia; Kildare, GA-SC 7.5-minute topographic quadrangle; lat. 32 degrees 34 minutes 27 seconds N. and long. 81 degrees 27 minutes 10 seconds W.

A—0 to 9 inches; brown (10YR 4/3) loamy sand; weak fine granular structure; very friable; many fine roots; moderately acid; abrupt smooth boundary.
E—9 to 26 inches; light yellowish brown (10YR 6/4) loamy sand; weak fine granular structure; very friable; many fine roots; moderately acid; clear smooth boundary.
Bt—26 to 35 inches; brownish yellow (10YR 6/6) sandy loam; weak fine subangular blocky structure; friable; common fine roots; common medium distinct strong brown (7.5YR 5/6) masses of oxidized iron; strongly acid; clear smooth boundary.
Btv1—35 to 48 inches; brownish yellow (10YR 6/6) sandy clay loam; weak medium subangular blocky structure; friable; few fine roots; few fine pores; few faint clay films on faces of peds; 5 percent nodular plinthite; many medium distinct strong brown (7.5YR 5/6) masses of oxidized iron and common medium distinct light gray (10YR 7/2) iron depletions; strongly acid; gradual wavy boundary.
Btv2—48 to 61 inches; brownish yellow (10YR 6/6) sandy clay loam; moderate medium subangular blocky structure; friable; few fine roots; few fine pores; few faint clay films on faces of peds; 10 percent platy plinthite; common medium distinct reddish brown (7.5YR 7/6) masses of oxidized iron and many medium distinct light gray (10YR 7/2) iron depletions; very strongly acid; gradual wavy boundary.
B´t—61 to 77 inches; strong brown (7.5YR 5/8) sandy clay loam; moderate medium subangular blocky structure; firm; common fine pores; few distinct clay films on faces of peds; 2 percent nodular plinthite; common medium prominent dark red (2.5YR 3/6) masses of oxidized iron and common medium prominent light gray (10YR 7/1) iron depletions; strongly acid; clear wavy boundary.
BC—77 to 80 inches; strong brown (7.5YR 5/8) sandy clay loam; weak medium subangular blocky structure; friable; common fine pores; few medium distinct clay films on faces of peds; common medium prominent dark red (2.5YR 3/6) masses of oxidized iron and common medium prominent light gray (10YR 7/1) iron depletions; common fine pores; very strongly acid.

Range in Characteristics

Thickness of the solum: 69 inches or more
Thickness of the sandy epipedon: 20 to 36 inches
Plinthite: 5 to 18 percent between a depth of 25 and 60 inches
Rock fragments: 0 to 5 percent, by volume, ironstone nodules
Reaction: Very strongly acid or strongly acid, except for the surface layer in limed areas

A or Ap horizon:
Color—hue of 10YR, value of 3 or 4, and chroma of 2 or 3
Texture—sand or loamy sand

E horizon:
Color—hue 10YR or 2.5Y, value of 5 to 7, and chroma of 3 to 6
Texture—sand or loamy sand

Bt horizon:
Color—hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 4 to 8
Texture—sandy loam or sandy clay loam
Redoximorphic features—none to common masses of oxidized iron in shades of red, yellow, or brown

Btv horizon:
Color—hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 4 to 6
Texture—sandy clay loam
Redoximorphic features—common or many masses of oxidized iron in shades of red, yellow, or brown and common iron depletions in shades of gray

Btgv horizon:
Color—hue of 10YR or 2.5Y, value of 6, and chroma of 1 or 2
Texture—sandy loam to sandy clay loam
Redoximorphic features—common or many masses of oxidized iron in shades of red, yellow, or brown

Btg horizon:
Color—hue of 10YR or 2.5Y, value of 6 or 7, and chroma of 1 or 2
Texture—sandy clay loam
Redoximorphic features—common masses of oxidized iron in shades of red, yellow, or brown

BC horizon:
Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 4 to 8
Texture—sandy loam or sandy clay loam
Redoximorphic features—common or many masses of oxidized iron in shades of red, yellow, or brown and none to common iron depletions in shades of gray

Surrency Series

Landform: Depressions and drainageways
Parent material: Loamy and sandy marine deposits
Drainage class: Very poorly drained
Permeability: Moderate
Depth class: Very deep
Slope range: 0 to 1 percent
Commonly associated soils: Mascotte, Pelham, Pickney, Rains, and Rigdon
Taxonomic classification: Loamy, siliceous, semiactive, thermic Arenic Umbric Paleaquults

Typical Pedon

Surrency mucky sand, 0 to 1 percent slopes, frequently flooded; 1.2 miles west on Oliver-Kildare Road from its intersection with GA Highway 21, about 0.1 mile north on an unimproved woods road; in Effingham County, Georgia; Kildare, GA 7.5-minute topographic quadrangle; lat. 32 degrees 31 minutes 41 seconds N. and long. 81 degrees 28 minutes 45 seconds W.

A—0 to 22 inches; black (10YR 2/1) mucky sand; weak fine granular structure; very friable; many fine and medium roots; very strongly acid; gradual wavy boundary.
Btg1—22 to 35 inches; dark gray (10YR 4/1) sandy loam; weak medium subangular

blocky structure; friable; few fine and common medium roots; very strongly acid; gradual wavy boundary.
Btg2—35 to 58 inches; dark gray (10YR 4/1) sandy clay loam; weak medium subangular blocky structure; friable; few sand lenses on faces of peds; common fine prominent yellowish brown (10YR 5/6) masses of oxidized iron; very strongly acid; gradual wavy boundary.
Btg3—58 to 80 inches; dark gray (10YR 4/1) sandy clay loam; weak medium subangular blocky structure; friable; common medium prominent strong brown (7.5YR 5/8) and few fine prominent yellowish brown (10YR 5/6) masses of oxidized iron; very strongly acid.

Range in Characteristics

Thickness of the solum: 50 inches or more
Thickness of the sandy epipedon: 21 to 39 inches
Reaction: Extremely acid to strongly acid

A horizon:
Color—horizon has hue of 10YR, 2.5Y, or 5Y, value of 2 or 3, and chroma of 1 or 2 or it is neutral in hue and has value of 2 or 3
Texture—sand, fine sand, loamy sand, loamy fine sand, mucky sand, or mucky fine sand

E horizon (if it occurs):
Color—hue of 10YR or 2.5Y, value of 4 to 7, and chroma of 1 or 2
Texture—sand, fine sand, loamy sand, or loamy fine sand
Redoximorphic features (if they occur)—common or many masses of oxidized iron in shades of red, yellow, or brown and iron depletions in shades of olive or gray

Btg horizon:
Color—hue of 10YR, 2.5Y, 5Y, or 5G, value of 4 to 7, and chroma of 1 or 2
Texture—sandy loam, fine sandy loam, or sandy clay loam Redoximorphic features—common or many masses of oxidized iron in shades of red, yellow, or brown and iron depletions in shades of olive or gray
Other characteristics—the control section clay content is dominantly 10 to 18 percent and, below a depth of about 50 inches, is 23 to 35 percent

Cg horizon (if it occurs):
Color—hue of 10YR to 5GY, value of 5 to 7, and chroma of 1 or 2
Texture—fine sand, loamy fine sand, fine sandy loam, or sandy clay loam
Redoximorphic features (if they occur)—common or many masses of oxidized iron in shades of red, yellow, or brown and iron depletions in shades of olive or gray

Tawcaw Series

Landform: Flood plains
Parent material: Silty and clayey alluvium
Drainage class: Somewhat poorly drained
Permeability: Slow
Depth class: Very deep
Slope range: 0 to 2 percent
Commonly associated soils: Bladen, Chastain, Eulonia, and Levy
Taxonomic classification: Fine, kaolinitic, thermic Fluvaquentic Dystrudepts

Typical Pedon

Tawcaw silty clay loam in an area of Chastain and Tawcaw soils, 0 to 2 percent slopes, frequently flooded; from Sylvania, about 10.8 miles northeast on Brannens

Bridge Road, 3.6 miles east on a gravel road, 400 feet south on an unimproved road, 50 feet east of the road; in Screven County, Georgia; Brier Creek Landing, GA 7.5-minute topographic quadrangle; lat. 32 degrees 48 minutes 01 second N. and long. 81 degrees 25 minutes 54 seconds W.

A—0 to 2 inches; brown (7.5YR 4/3) silty clay loam; weak fine granular structure; friable; few flakes of mica; many fine roots; moderately acid; clear smooth boundary.

Bw1—2 to 18 inches; yellowish brown (10YR 5/4) silty clay loam; weak medium subangular blocky structure; friable; few medium faint pale brown (10YR 6/3) iron depletions; common manganese concretions; few flakes of mica; few medium and common fine roots; strongly acid; gradual smooth boundary.

Bw2—18 to 39 inches; strong brown (7.5YR 4/6) silty clay loam; moderate medium subangular blocky structure; friable; many medium faint red (2.5YR 4/6) masses of oxidized iron and common medium prominent light brownish gray (10YR 6/2) iron depletions; many manganese concretions; few flakes of mica; few fine roots; strongly acid; gradual smooth boundary.

Bw3—39 to 49 inches; strong brown (7.5YR 5/6) silty clay loam; weak medium subangular blocky structure; friable; many medium distinct red (2.5YR 4/6) masses of oxidized iron; many medium prominent light brownish gray (10YR 6/2) iron depletions; many manganese concretions; common flakes of mica; few fine roots; moderately acid; gradual smooth boundary.

C—49 to 80 inches; yellowish red (5YR 4/6) loamy sand; massive; friable; few medium prominent pale brown (10YR 6/3) iron depletions; common flakes of mica; moderately acid.

Range in Characteristics

Thickness of the solum: 40 to 72 inches or more

Reaction: Very strongly acid to slightly acid

Other features: Few to many flakes of mica and few to many concretions of manganese throughout the solum

A horizon:

Color—hue of 5YR to 10YR, value of 3 to 5, and chroma of 2 to 6

Texture—loam, silt loam, silty clay loam, clay loam, silty clay, or clay

Bw horizon (upper part):

Color—hue of 5YR to 10YR, value of 4 to 6, and chroma of 3 to 8

Texture—silty clay, silty clay loam, clay loam, or clay

Redoximorphic features—masses of oxidized iron in shades of red, yellow, or brown and iron depletions in shades of gray

BC horizon (if it occurs):

Color—hue of 7.5YR to 2.5Y, value of 4 to 7, and chroma of 1 to 3

Texture—loam, silty clay loam, clay loam, or sandy clay loam

Redoximorphic features—masses of oxidized iron in shades of red, yellow, or brown and iron depletions in shades of gray

C horizon:

Color—hue of 7.5YR to 2.5Y, value of 4 to 7, and chroma of 1 to 6

Texture—variable

Redoximorphic features—masses of oxidized iron in shades of red, yellow, or brown and iron depletions in shades of gray

Formation of the Soils

Gary Hankins Jr., Soil Scientist, Natural Resources Conservation Service, prepared this section.

This section describes the factors of soil formation and relates them to the soils in the survey area. It also discusses the processes of horizon differentiation.

Factors of Soil Formation

Soil characteristics are determined by the physical and mineralogical composition of the parent material; the plants and animals living on and in the soil; the climate under which the parent material accumulated and has existed since accumulation; the relief, or lay of the land; and the length of time that the forces of soil formation have acted on the soil material. All of these factors influence every soil, but the significance of each factor varies from place to place. In one area, one factor may dominate soil formation; in another area, a different factor may dominate.

The interrelationships among these five factors are complex, and the effects of any one factor cannot be isolated and completely evaluated. It is convenient, however, to describe each factor separately and to indicate the probable effects of each.

Parent Material

Parent material is the unconsolidated mass in which a soil forms. The chemical and mineralogical composition of the soil is derived largely from the parent material.

The soils in Effingham County formed in marine-deposited and -transported materials as the sea level fluctuated across the county. Chipley, Echaw, and Foxworth soils are examples of soils that developed in sandy barrier islands left on the landscape as the sea level dropped. These soils have faintly developed horizons due to their sandy origins. Albany, Pelham, Rains, and Surrency soils developed from mixed sand and clay sediments that were deposited by tidal streams and estuaries. Chastain, Levy, and Tawcaw soils are examples of soils that formed in recent alluvium that washed from the Coastal Plain and were deposited by larger streams. Soils that formed at higher elevations were exposed to the processes of geological erosion for longer periods of time. The land features showing marine influences are not as distinct at lower elevations. Dothan and Fuquay soils are examples of soils that developed from older exposed sediments.

Plants and Animals

The effects of plants, animals, and other organisms on soil formation are significant. Plants and animals increase the content of organic matter and nitrogen, increase or decrease the content of plant nutrients, and change soil structure and porosity.

Plants recycle nutrients, add organic matter, and provide food and cover for animals. They stabilize the surface layer so that the soil-forming processes can

continue. They also provide a more stable environment for the soil-forming processes by protecting the soils from extremes in temperature. The soils in the survey area formed under a succession of briers, brambles, and woody plants that were dominated by pines and hardwoods. Longleaf pines eventually suppressed most other plants and became the dominant type of plant in the climax plant community.

Animals rearrange soil material by making the surface rough, by forming and filling channels, and by shaping the peds and voids. The soil is mixed by ants, wasps, worms, and spiders, which make channels; by crustaceans, such as crayfish; and by turtles and foxes, which dig burrows. Humans affect the soil-forming processes by tilling, removing natural vegetation and establishing different plants, and reducing or increasing the level of fertility. Bacteria, fungi, and other micro-organisms hasten the decomposition of organic matter and increase the rate at which nutrients are released for plant growth.

The net gains and losses caused by plants and animals are important in the survey area. Within the relatively small confines of the survey area, however, one soil is not significantly different from another because of the effects of plants and animals.

Climate

The present climate of the survey area is probably similar to the climate that existed when the soils formed. The relatively high amount of rainfall and the warm temperatures contribute to rapid soil formation. Rainfall and temperature are the two most important climatic features that relate to soil properties.

Water from precipitation is essential in the formation of soil. Water dissolves soluble materials and is used by plants and animals. It transports material from one part of the soil to another part and from one area of the landscape to another area.

The soils in the survey area formed under a thermic temperature regime. In a thermic temperature regime, the mean soil temperature at a depth of 20 inches is 59 to 72 degrees F. Based on the mean annual air temperature, the estimated soil temperature in the survey area is 67 degrees F. The rate of chemical reactions and other processes in the soil depends to some extent on temperature. In addition, temperature affects the type and quality of vegetation, the amount and kind of organic matter, and the rate at which the organic matter decomposes.

Relief

Relief is the elevations or inequalities of a land surface considered collectively. The color of the soil, the degree of wetness, the thickness of the A horizon, the content of organic matter, and the plant cover are commonly related to relief.

In the survey area, the most obvious effects of relief are those that relate to soil color and the degree of soil wetness. Pelham and Surrency soils have dominant gray colors in the subsoil, whereas Fuquay and Blanton soils have a yellowish brown subsoil. The difference in color results from a difference in relief and a corresponding difference in internal drainage. Because Fuquay and Blanton soils are in the higher positions on the landscape and are better drained than Pelham and Surrency soils, Fuquay and Blanton soils are better oxidized and have a browner subsoil.

The movement of water across the surface and through the soil is controlled mostly by relief. Water flowing across the surface commonly carries solid particles and causes erosion or deposition, depending on the kind of relief. In the sloping areas, the soils are drier because more water runs off and less water penetrates the surface. The soils in low-lying areas are commonly wetter because they receive the water that flows off and through the soils in the higher positions of the landscape.

Time

The length of time that the soil-forming processes have acted on the parent material helps to determine the characteristics of the soil. Determinations of when soil formation began in the survey area are not exact. Most of the soils are considered mature.

Mature soils are in equilibrium with the environment. They are characterized by pedogenic horizons that are readily recognizable and a carbon content that decreases regularly as depth increases. Some areas of Dothan soils are on stable landscapes where the soil-forming processes have been active for thousands of years. These mature soils have a solum that is highly weathered and a zone of illuviation that is well expressed.

Levy soils are young soils. They receive sediment annually from floodwater. They are stratified and are not old enough to have a zone of illuviation. They do not have pedogenic horizons and are characterized by a carbon content that decreases irregularly as the depth increases.

Processes of Horizon Differentiation

One or more soil-forming processes are involved in the formation of soil horizons. These processes are the accumulation of organic matter; the chemical weathering, mainly by hydrolysis, of primary minerals into silicate clay minerals; the translocation of silicate clay and some silt-sized particles from one horizon to another; and the reduction and transfer of iron.

These processes have been active in the formation of most of the soils in the survey area. The interaction of most of the processes is indicated by the strongly expressed horizons in Dothan and Fuquay soils. All of the processes have probably been active in the formation of the moderately well drained Clarendon and Stilson soils.

Some organic matter has accumulated in all of the soils in the survey area. Most of the soils contain moderately low amounts of organic matter in the surface layer. The content of organic matter in the surface layer ranges from low, as in Blanton soils, to high, as in Pickney soils.

The translocation of clay minerals is an important process in the development of many soils in the survey area. As clay minerals are removed from the A horizon, they accumulate as clay films on the faces of peds, in pores, and in root channels in the B horizon.

As silicate clay forms from primary minerals, some iron is commonly released as hydrated oxides. These oxides are generally red. Even if they occur in small amounts, they give the soil material a brownish color. They are largely responsible for the strong brown, yellowish brown, or brownish yellow colors that are dominant in the subsoil of many soils in the survey area.

The reduction and transfer of iron has occurred in all of the soils that are not characterized by good natural drainage. This process, known as gleying, is evidenced by a gray matrix color and by iron or clay depletions. Some of the iron may be reoxidized and segregated and thus form yellow, brown, red, or other brightly colored masses of iron accumulation in an essentially gray matrix in the subsoil. Nodules or concretions of iron ore or manganese also commonly form as a result of this process. Soil features associated with chemically reduced iron are referred to as redoximorphic features *(19)*.

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Glossary

Aggregate, soil. Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

Alluvium. Unconsolidated material, such as gravel, sand, silt, clay, and various mixtures of these, deposited on land by running water.

Animal unit month (AUM). The amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.

Aquic conditions. Current soil wetness characterized by saturation, reduction, and redoximorphic features.

Argillic horizon. A subsoil horizon characterized by an accumulation of illuvial clay.

Aspect. The direction toward which a slope faces. Also called slope aspect.

Available water capacity (available moisture capacity). The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

Very low	0 to 3
Low	3 to 6
Moderate	6 to 9
High	9 to 12
Very high	more than 12

Backslope. The position that forms the steepest and generally linear, middle portion of a hillslope. In profile, backslopes are commonly bounded by a convex shoulder above and a concave footslope below.

Backswamp. A flood-plain landform. Extensive, marshy or swampy, depressed areas of flood plains between natural levees and valley sides or terraces.

Basal area. The area of a cross section of a tree, generally referring to the section at breast height and measured outside the bark. It is a measure of stand density, commonly expressed in square feet.

Base saturation. The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, and K), expressed as a percentage of the total cation-exchange capacity.

Bedrock. The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.

Bisequum. Two sequences of soil horizons, each of which consists of an illuvial horizon and the overlying eluvial horizons.

Bottom land. An informal term loosely applied to various portions of a flood plain.

Breast height. An average height of 4.5 feet above the ground surface; the point on a tree where diameter measurements are ordinarily taken.

Canopy. The leafy crown of trees or shrubs. (See Crown.)

Capillary water. Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.

Catena. A sequence, or "chain," of soils on a landscape that formed in similar kinds of parent material and under similar climatic conditions but that have different characteristics as a result of differences in relief and drainage.

Cation. An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.

Cation-exchange capacity. The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.

Clay. As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

Clay depletions. See Redoximorphic features.

Clay film. A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.

Climax plant community. The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.

Coarse textured soil. Sand or loamy sand.

COLE (coefficient of linear extensibility). See Linear extensibility.

Complex slope. Irregular or variable slope. Planning or establishing terraces, diversions, and other water-control structures on a complex slope is difficult.

Complex, soil. A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.

Concretions. See Redoximorphic features.

Conservation cropping system. Growing crops in combination with needed cultural and management practices. In a good conservation cropping system, the soil-improving crops and practices more than offset the effects of the soil-depleting crops and practices. Cropping systems are needed on all tilled soils. Soil-improving practices in a conservation cropping system include the use of rotations that contain grasses and legumes and the return of crop residue to the soil. Other practices include the use of green manure crops of grasses and legumes, proper tillage, adequate fertilization, and weed and pest control.

Conservation tillage. A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.

Consistence, soil. Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when subject to compression. Terms describing consistence are defined in the "Soil Survey Manual."

Control section. The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches and 40 or 80 inches.

Corrosion (soil survey interpretations). Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.

Cover crop. A close-growing crop grown primarily to improve and protect the soil between periods of regular crop production, or a crop grown between trees and vines in orchards and vineyards.

Crop residue management. Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.

Cropping system. Growing crops according to a planned system of rotation and management practices.

Crown. The upper part of a tree or shrub, including the living branches and their foliage.

Culmination of the mean annual increment (CMAI). The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.

Cutbanks cave (in tables). The walls of excavations tend to cave in or slough.

Deferred grazing. Postponing grazing or resting grazing land for a prescribed period.

Depth, soil. Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches deep over bedrock; deep soils, 40 to 60 inches; moderately deep, 20 to 40 inches; shallow, 10 to 20 inches; and very shallow, less than 10 inches.

Drainage class (natural). Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—*excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained,* and *very poorly drained*. These classes are defined in the "Soil Survey Manual."

Drainage, surface. Runoff, or surface flow of water, from an area.

Drainageway. A general term for a course or channel along which water moves in draining an area. A term restricted to relatively small, linear depressions that at some time move concentrated water and either do not have a defined channel or have only a small defined channel.

Ecological site. An area where climate, soil, and relief are sufficiently uniform to produce a distinct natural plant community. An ecological site is the product of all the environmental factors responsible for its development. It is typified by an association of species that differ from those on other ecological sites in kind and/or proportion of species or in total production.

Eluviation. The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.

Endosaturation. A type of saturation of the soil in which all horizons between the upper boundary of saturation and a depth of 2 meters are saturated.

Eolian deposit. Sand-, silt-, or clay-sized clastic material transported and deposited primarily by wind, commonly in the form of a dune or a sheet of sand or loess.

Ephemeral stream. A stream, or reach of a stream, that flows only in direct response to precipitation. It receives no long-continued supply from melting snow or other source, and its channel is above the water table at all times.

Episaturation. A type of saturation indicating a perched water table in a soil in which saturated layers are underlain by one or more unsaturated layers within 2 meters of the surface.

Erosion. The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep.

Erosion (geologic). Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.

Erosion (accelerated). Erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, such as a fire, that exposes the surface.

Erosion surface. A land surface shaped by the action of erosion, especially by running water.

Escarpment. A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Most commonly applied to cliffs produced by differential erosion. Synonym: scarp.

Fallow. Cropland left idle in order to restore productivity through accumulation of moisture. Summer fallow is common in regions of limited rainfall where cereal grain is grown. The soil is tilled for at least one growing season for weed control and decomposition of plant residue.

Fertility, soil. The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.

Fibric soil material (peat). The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.

Field moisture capacity. The moisture content of a soil, expressed as a percentage of the ovendry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity, normal moisture capacity,* or *capillary capacity*.

Fine textured soil. Sandy clay, silty clay, or clay.

Firebreak. An area cleared of flammable material to stop or help control creeping or running fires. It also serves as a line from which to work and to facilitate the movement of firefighters and equipment. Designated roads also serve as firebreaks.

Flood plain. The nearly level plain that borders a stream and is subject to flooding unless protected artificially.

Flood-plain landforms. A variety of constructional and erosional features produced by stream channel migration and flooding. Examples include backswamps, flood-plain splays, meanders, meander belts, meander scrolls, oxbow lakes, and natural levees.

Fluvial. Of or pertaining to rivers or streams; produced by stream or river action.

Footslope. The concave surface at the base of a hillslope. A footslope is a transition zone between upslope sites of erosion and transport (shoulders and backslopes) and downslope sites of deposition (toeslopes).

Forb. Any herbaceous plant not a grass or a sedge.

Forest cover. All trees and other woody plants (underbrush) covering the ground in a forest.

Forest type. A stand of trees similar in composition and development because of given physical and biological factors by which it may be differentiated from other stands.

Genesis, soil. The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.

Gleyed soil. Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.

Gravel. Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.

Gravelly soil material. Material that has 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 centimeters) in diameter.

Green manure crop (agronomy). A soil-improving crop grown to be plowed under in an early stage of maturity or soon after maturity.

Ground water. Water filling all the unblocked pores of the material below the water table.

Hardpan. A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey and is cemented by iron oxide, silica, calcium carbonate, or other substance.

Head slope (geomorphology). A geomorphic component of hills consisting of a laterally concave area of a hillside, especially at the head of a drainageway. The overland waterflow is converging.

Hemic soil material (mucky peat). Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.

High-residue crops. Such crops as small grain and corn used for grain. If properly managed, residue from these crops can be used to control erosion until the next crop in the rotation is established. These crops return large amounts of organic matter to the soil.

Hillslope. A generic term for the steeper part of a hill between its summit and the drainage line, valley flat, or depression floor at the base of a hill.

Horizon, soil. A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. An explanation of the subdivisions is given in the "Soil Survey Manual." The major horizons of mineral soil are as follows:

O horizon.—An organic layer of fresh and decaying plant residue.

A horizon.—The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.

E horizon.—The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.

B horizon.—The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.

C horizon.—The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.

Humus. The well decomposed, more or less stable part of the organic matter in mineral soils.

Hydrologic soil groups. Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties are depth to a seasonal high water table, the infiltration rate and permeability after prolonged wetting, and depth to a very slowly permeable layer. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.

Illuviation. The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.

Infiltration. The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

Infiltration capacity. The maximum rate at which water can infiltrate into a soil under a given set of conditions.

Infiltration rate. The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.

Interfluve. A landform composed of the relatively undissected upland or ridge between two adjacent valleys containing streams flowing in the same general direction. An elevated area between two drainageways that sheds water to those drainageways.

Intermittent stream. A stream, or reach of a stream, that does not flow year-round but that is commonly dry for 3 or more months out of 12 and whose channel is generally below the local water table. It flows only during wet periods or when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

Iron depletions. See Redoximorphic features.

Irrigation. Application of water to soils to assist in production of crops. Methods of irrigation include *sprinkler*, in which water is sprayed over the soil surface through pipes or nozzles from a pressure system.

K_{sat}. Saturated hydraulic conductivity. (See Permeability.)

Leaching. The removal of soluble material from soil or other material by percolating water.

Linear extensibility. Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrink-swell potential of soils. It is an expression of the volume change between the water content of the clod at $^1/_3$- or $^1/_{10}$-bar tension (33kPa or 10kPa tension) and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.

Liquid limit. The moisture content at which the soil passes from a plastic to a liquid state.

Loam. Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

Low strength. The soil is not strong enough to support loads.

Masses. See Redoximorphic features.

Mechanical treatment. Use of mechanical equipment for seeding, brush management, and other management practices.

Medium textured soil. Very fine sandy loam, loam, silt loam, or silt.

Mineral soil. Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.

Minimum tillage. Only the tillage essential to crop production and prevention of soil damage.

Miscellaneous area. A kind of map unit that has little or no natural soil and supports little or no vegetation.

Moderately coarse textured soil. Coarse sandy loam, sandy loam, or fine sandy loam.

Moderately fine textured soil. Clay loam, sandy clay loam, or silty clay loam.

Morphology, soil. The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.

Mottling, soil. Irregular spots of different colors that vary in number and size. Descriptive terms are as follows: abundance—*few, common,* and *many;* size—*fine, medium,* and *coarse;* and contrast—*faint, distinct,* and *prominent*. The size measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 inch); *medium,* from 5 to 15 millimeters (about 0.2 to 0.6 inch); and *coarse,* more than 15 millimeters (about 0.6 inch).

Muck. Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)

Munsell notation. A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.

Neutral soil. A soil having a pH value of 6.6 to 7.3. (See Reaction, soil.)

Nodules. See Redoximorphic features.

Nutrient, plant. Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.

Organic matter. Plant and animal residue in the soil in various stages of decomposition. The content of organic matter in the surface layer is described as follows:

Very low	less than 0.5 percent
Low	0.5 to 1.0 percent
Moderately low	1.0 to 2.0 percent
Moderate	2.0 to 4.0 percent
High	4.0 to 8.0 percent
Very high	more than 8.0 percent

Parent material. The unconsolidated organic and mineral material in which soil forms.

Peat. Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)

Ped. An individual natural soil aggregate, such as a granule, a prism, or a block.

Pedon. The smallest volume that can be called "a soil." A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square meter to 10 square meters), depending on the variability of the soil.

Permeability. The quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted as a measure of this quality. In soil physics, the rate is referred to as "saturated hydraulic conductivity," which is defined in the "Soil Survey Manual." In line with conventional usage in the engineering profession and with traditional usage in published soil surveys, this rate of flow continues to be expressed as "permeability." Terms describing permeability, measured in inches per hour, are as follows:

Impermeable	less than 0.0015 inch
Very slow	0.0015 to 0.06 inch
Slow	0.06 to 0.2 inch
Moderately slow	0.2 to 0.6 inch
Moderate	0.6 inch to 2.0 inches
Moderately rapid	2.0 to 6.0 inches

Rapid	6.0 to 20 inches
Very rapid	more than 20 inches

pH value. A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)

Phase, soil. A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

Plastic limit. The moisture content at which a soil changes from semisolid to plastic.

Plasticity index. The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.

Plinthite. The sesquioxide-rich, humus-poor, highly weathered mixture of clay with quartz and other diluents. It commonly appears as red mottles, usually in platy, polygonal, or reticulate patterns. Plinthite changes irreversibly to an ironstone hardpan or to irregular aggregates on repeated wetting and drying, especially if it is exposed also to heat from the sun. In a moist soil, plinthite can be cut with a spade. It is a form of laterite.

Ponding. Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.

Poorly graded. Refers to a coarse-grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.

Pore linings. See Redoximorphic features.

Potential rooting depth (effective rooting depth). Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.

Prescribed burning. Deliberately burning an area for specific management purposes, under the appropriate conditions of weather and soil moisture and at the proper time of day.

Productivity, soil. The capability of a soil for producing a specified plant or sequence of plants under specific management.

Profile, soil. A vertical section of the soil extending through all its horizons and into the parent material.

Proper grazing use. Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This practice increases the vigor and reproduction capacity of the key plants and promotes the accumulation of litter and mulch necessary to conserve soil and water.

Reaction, soil. A measure of acidity or alkalinity of a soil, expressed as pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

Ultra acid	less than 3.5
Extremely acid	3.5 to 4.4
Very strongly acid	4.5 to 5.0
Strongly acid	5.1 to 5.5
Moderately acid	5.6 to 6.0
Slightly acid	6.1 to 6.5
Neutral	6.6 to 7.3
Slightly alkaline	7.4 to 7.8
Moderately alkaline	7.9 to 8.4
Strongly alkaline	8.5 to 9.0
Very strongly alkaline	9.1 and higher

Redoximorphic concentrations. See Redoximorphic features.

Redoximorphic depletions. See Redoximorphic features.

Redoximorphic features. Redoximorphic features are associated with wetness and result from alternating periods of reduction and oxidation of iron and manganese compounds in the soil. Reduction occurs during saturation with water, and oxidation occurs when the soil is not saturated. Characteristic color patterns are created by these processes. The reduced iron and manganese ions may be removed from a soil if vertical or lateral fluxes of water occur, in which case there is no iron or manganese precipitation in that soil. Wherever the iron and manganese are oxidized and precipitated, they form either soft masses or hard concretions or nodules. Movement of iron and manganese as a result of redoximorphic processes in a soil may result in redoximorphic features that are defined as follows:

1. Redoximorphic concentrations.—These are zones of apparent accumulation of iron-manganese oxides and include nodules and concretions, masses, and pore linings. *Nodules and concretions* are cemented bodies that can be removed from the soil intact. Concretions are distinguished from nodules on the basis of internal organization. A concretion typically has concentric layers that are visible to the naked eye. Nodules do not have visible organized internal structure. *Masses* are noncemented concentrations of substances within the soil matrix. *Pore linings* are zones of accumulation along pores that may be either coatings on pore surfaces or impregnations from the matrix adjacent to the pores.
2. Redoximorphic depletions.—These are zones of low chroma (chromas less than those in the matrix) where either iron-manganese oxides alone or both iron-manganese oxides and clay have been stripped out and include iron depletions and clay depletions. *Iron depletions* are zones that contain low amounts of iron and manganese oxides but have a clay content similar to that of the adjacent matrix. *Clay depletions* are zones that contain low amounts of iron, manganese, and clay (often referred to as silt coatings or skeletans).
3. Reduced matrix.—This is a soil matrix that has low chroma *in situ* but undergoes a change in hue or chroma within 30 minutes after the soil material has been exposed to air.

Reduced matrix. See Redoximorphic features.

Relief. The relative difference in elevation between the upland summits and the lowlands or valleys of a given region.

Rock fragments. Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.

Root zone. The part of the soil that can be penetrated by plant roots.

Runoff. The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called ground-water runoff or seepage flow from ground water.

Sand. As a soil separate, individual rock or mineral fragments ranging from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.

Sapric soil material (muck). The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.

Saturated hydraulic conductivity (K_{sat}). See Permeability.

Saturation. Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.

Sequum. A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)

Series, soil. A group of soils that have profiles that are almost alike. All the soils of a given series have horizons that are similar in composition, thickness, and arrangement.

Shoulder. The convex, erosional surface near the top of a hillslope. A shoulder is a transition from summit to backslope.

Shrink-swell (in tables). The shrinking of soil when dry and the swelling when wet. Shrinking and swelling can damage roads, dams, building foundations, and other structures. It can also damage plant roots.

Side slope (geomorphology). A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel. Side slopes are dominantly colluvium and slope-wash sediments.

Silica. A combination of silicon and oxygen. The mineral form is called quartz.

Silt. As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.

Similar soils. Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.

Site index. A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.

Slope. The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance. In this survey, classes for simple slopes are as follows:

Nearly level	0 to 2 percent
Very gently sloping	2 to 5 percent
Gently sloping	5 to 8 percent
Sloping	8 to 12 percent
Strongly sloping	12 to 15 percent
Moderately steep	15 to 25 percent
Steep	25 to 40 percent
Very steep	40 percent and highe

Soil. A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief and by the passage of time.

Soil separates. Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand	2.0 to 1.0
Coarse sand	1.0 to 0.5
Medium sand	0.5 to 0.25
Fine sand	0.25 to 0.10
Very fine sand	0.10 to 0.05
Silt	0.05 to 0.002
Clay	less than 0.002

Solum. The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of

the material below the solum. The living roots and plant and animal activities are largely confined to the solum.

Stream terrace. One of a series of platforms in a stream valley, flanking and more or less parallel to the stream channel, originally formed near the level of the stream; represents the remnants of an abandoned flood plain, stream bed, or valley floor produced during a former state of fluvial erosion or deposition.

Structure, soil. The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are—*platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. *Structureless* soils are either *single grain* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).

Subsoil. Technically, the B horizon; roughly, the part of the solum below plow depth.

Subsoiling. Tilling a soil below normal plow depth, ordinarily to shatter a hardpan or claypan.

Substratum. The part of the soil below the solum.

Subsurface layer. Any surface soil horizon (A, E, AB, or EB) below the surface layer.

Surface layer. The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 centimeters). Frequently designated as the "plow layer," or the "Ap horizon."

Surface soil. The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.

Terrace (geomorphology). A steplike surface, bordering a valley floor or shoreline, that represents the former position of a flood plain, lake, or seashore. The term is usually applied both to the relatively flat summit surface (tread) that was cut or built by stream or wave action and to the steeper descending slope (scarp or riser) that has graded to a lower base level of erosion.

Texture, soil. The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay,* and *clay*. The sand, loamy sand, and sandy loam classes may be further divided by specifying "coarse," "fine," or "very fine."

Tilth, soil. The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.

Topsoil. The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.

Trace elements. Chemical elements, for example, zinc, cobalt, manganese, copper, and iron, in soils in extremely small amounts. They are essential to plant growth.

Tread. The flat to gently sloping, topmost, laterally extensive slope of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural steplike landforms, such as successive stream terraces.

Upland. An informal, general term for the higher ground of a region, in contrast with a low-lying adjacent area, such as a valley or plain, or for land at a higher elevation than the flood plain or low stream terrace; land above the footslope zone of the hillslope continuum.

Water bars. Smooth, shallow ditches or depressional areas that are excavated at an angle across a sloping road. They are used to reduce the downward velocity of water and divert it off and away from the road surface. Water bars can easily be driven over if constructed properly.

Weathering. All physical disintegration, chemical decomposition, and biologically induced changes in rocks or other deposits at or near the earth's surface by

atmospheric or biologic agents or by circulating surface waters but involving essentially no transport of the altered material.

Well graded. Refers to soil material consisting of coarse-grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.

Wilting point (or permanent wilting point). The moisture content of soil, on an ovendry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

Tables

Table 1.—Temperature and Precipitation

(Recorded for the period 1971 2000 at Ridgeland, SC)

Month	Temperature (Degrees F.)						Precipitation (Inches)				
				2 yrs in 10 will have				2 yrs in 10 will have		avg # of days w/.1 or more	avg total snow fall
	avg daily max	avg daily min	avg	max temp. >than	min temp. <than	avg # of grow deg days*	avg	less than	more than		
January	59.7	37.5	48.6	78	14	94	4.36	2.27	6.37	7	0.1
February	63.8	39.7	51.8	83	18	131	3.50	1.82	5.08	6	0.3
March	71.0	46.4	58.7	87	25	290	3.94	2.24	5.47	6	0.0
April	77.9	52.4	65.1	92	33	449	3.38	1.41	5.16	5	0.0
May	83.7	60.7	72.2	95	43	686	3.84	1.72	5.80	6	0.0
June	88.7	67.2	78.0	100	53	826	5.44	2.92	7.51	7	0.0
July	91.8	70.7	81.2	102	62	960	5.44	3.28	7.42	8	0.0
August	89.6	69.8	79.7	99	60	916	6.95	3.12	10.37	9	0.0
September	85.4	65.6	75.5	96	49	760	4.91	1.64	8.17	7	0.0
October	77.5	54.9	66.2	91	33	500	3.23	0.99	5.01	4	0.0
November	69.7	46.5	58.1	84	25	267	2.83	1.36	4.25	4	0.0
December	62.3	40.1	51.2	80	16	140	3.56	1.85	5.32	6	0.2
Yearly :											
Average	76.8	54.3	65.5								
Extreme	105	2		102	12						
Total						6019	51.37	42.28	57.87	75	0.6

Average # of days per year with at least 1 inch of snow on the ground: 0

*A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minimum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principal crops in the area (Threshold: 50.0 deg. F)

Table 2.--Freeze Dates in Spring and Fall

(Recorded for the period 1971_1992 at Ridgeland, SC)

	Temperature		
Probability	24F or lower	28F or lower	32F or lower
Last freezing temperature in spring:			
1 year in 10 later than__	March 4	March 18	April 7
2 year in 10 later than__	February 25	March 10	April 1
5 year in 10 later than__	February 9	February 25	March 19
First freezing temperature in fall:			
1 yr in 10 earlier than__	November 17	November 2	October 25
2 yr in 10 earlier than__	December 1	November 11	November 1
5 yr in 10 earlier than__	December 29	November 30	November 15

Table 3.--Growing Season

(Recorded for the period 1971_1992 at Ridgeland, SC)

	Daily Minimum Temperature		
Probability	# days > 24F	# days > 28F	# days > 32F
9 years in 10	260	244	210
8 years in 10	281	255	220
5 years in 10	323	275	241
2 years in 10	> 365	295	261
1 year in 10	> 365	306	272

Table 4.--Acreage and Proportionate Extent of the Soils

Map symbol	Soil name	Acres	Percent
AbA	Albany sand, 0 to 2 percent slopes	7,810	2.5
BdA	Bladen fine sandy loam, 0 to 2 percent slopes	4,880	1.6
BfB	Blanton-Foxworth complex, 0 to 5 percent slopes	15,895	5.2
BuB	Blanton-Fuquay-Urban land complex, 0 to 5 percent slopes	3,600	1.2
CAA	Chastain and Tawcaw soils, 0 to 2 percent slopes, frequently flooded	19,715	6.4
ChA	Chipley sand, 0 to 2 percent slopes	2,215	0.7
CnA	Clarendon loamy sand, 0 to 2 percent slopes	4,925	1.6
DaA	Dasher mucky peat, 0 to 1 percent slopes, ponded	1,005	0.3
DcA	Dothan-Clarendon complex, 0 to 2 percent slopes	4,305	1.4
EcA	Echaw-Centenary complex, 0 to 2 percent slopes	7,120	2.3
EuA	Eulonia sandy loam, 0 to 2 percent slopes	1,710	0.6
FoA	Foxworth sand, 0 to 2 percent slopes	3,420	1.1
FuA	Fuquay loamy sand, 0 to 2 percent slopes	19,735	6.4
LeA	Leefield loamy sand, 0 to 2 percent slopes	26,660	8.6
LnA	Leon sand, 0 to 2 percent slopes	13,340	4.3
LvA	Levy silty clay loam, 0 to 1 percent slopes, frequently flooded	6,555	2.1
MaA	Mascotte sand, 0 to 2 percent slopes	11,705	3.8
MeA	Meldrim sand, 0 to 2 percent slopes	6,770	2.2
PeA	Pelham loamy sand, 0 to 2 percent slopes	38,960	12.6
PkA	Pickney mucky sand, 0 to 1 percent slopes, frequently flooded	22,860	7.4
RaA	Rains loamy sand, 0 to 2 percent slopes	6,175	2.0
RbF	Remlik-Blanton complex, 15 to 60 percent slopes	2,515	0.8
RdA	Ridgeland-Boulogne complex, 0 to 2 percent slopes	7,000	2.3
RgA	Rigdon sand, 0 to 2 percent slopes	9,780	3.2
RmA	Rigdon-Mascotte-Urban land complex, 0 to 2 percent slopes	3,330	1.1
StA	Stilson loamy sand, 0 to 2 percent slopes	10,790	3.5
SuA	Surrency mucky sand, 0 to 1 percent slopes, frequently flooded	41,215	13.4
Ud	Udorthents, loamy	1,490	0.5
W	Water	3,020	1.0
	Total	308,500	100.0

* Less than 0.1 percent.

Table 5.--Land Capability and Yields per Acre of Crops

(Yields are those that can be expected under a high level of management. They are for nonirrigated areas. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil)

Map symbol and soil name	Land capability	Corn	Cotton lint	Improved bermudagrass	Peanuts	Soybeans
		Bu	Lbs	AUM	Tons	Bu
AbA:						
Albany	3w	65.00	400.00	8.00	1,700.00	25.00
BdA:						
Bladen	6w	---	---	---	---	---
BfB:						
Blanton	3s	55.00	450.00	8.00	2,000.00	20.00
Foxworth	3s	55.00	400.00	7.00	1,400.00	20.00
BuB:						
Blanton	3s	55.00	450.00	8.00	2,000.00	20.00
Fuquay	2s	85.00	650.00	8.00	2,900.00	30.00
Urban land	8s	---	---	---	---	---
CAA:						
Chastain	7w	---	---	---	---	---
Tawcaw	6w	---	---	---	---	---
ChA:						
Chipley	3s	55.00	400.00	8.00	1,800.00	20.00
CnA:						
Clarendon	2w	125.00	700.00	10.50	3,000.00	45.00
DaA:						
Dasher	7w	---	---	---	---	---
DcA:						
Dothan	1	120.00	900.00	10.50	3,800.00	40.00
Clarendon	2w	125.00	700.00	10.50	3,000.00	45.00
EcA:						
Echaw	3s	65.00	400.00	7.50	1,500.00	25.00
Centenary	3s	55.00	350.00	7.00	1,400.00	20.00
EuA:						
Eulonia	2w	100.00	750.00	9.00	3,000.00	35.00
Bladen	6w	---	---	---	---	---
FoA:						
Foxworth	3s	55.00	400.00	7.00	1,400.00	20.00
FuA:						
Fuquay	2s	85.00	650.00	8.00	2,900.00	30.00
LeA:						
Leefield	3w	85.00	450.00	8.50	2,000.00	40.00
Pelham	5w	---	---	---	---	---

Table 5.--Land Capability and Yields per Acre of Crops--Continued

Map symbol and soil name	Land capability	Corn	Cotton lint	Improved bermudagrass	Peanuts	Soybeans
		Bu	Lbs	AUM	Tons	Bu
LnA:						
Leon	4w	50.00	---	7.50	---	20.00
Pelham	5w	---	---	---	---	---
LvA:						
Levy	7w	---	---	---	---	---
MaA:						
Mascotte	3w	50.00	---	7.50	---	20.00
Pelham	5w	---	---	---	---	---
MeA:						
Meldrim	3s	60.00	500.00	8.00	2,200.00	25.00
PeA:						
Pelham	5w	---	---	---	---	---
PkA:						
Pickney	7w	---	---	---	---	---
RaA:						
Rains	5w	---	---	---	---	---
RbF:						
Remlik	6e	---	---	---	---	---
Blanton	3s	55.00	450.00	8.00	2,000.00	20.00
RdA:						
Ridgeland	3w	65.00	450.00	7.50	1,600.00	7.50
Boulogne	3w	---	---	---	---	---
RgA:						
Rigdon	3w	70.00	450.00	8.00	1,800.00	30.00
RmA:						
Rigdon	3w	70.00	450.00	8.00	1,800.00	30.00
Mascotte	3w	50.00	---	7.50	---	20.00
Urban land	8s	---	---	---	---	---
StA:						
Stilson	2w	100.00	700.00	10.00	3,100.00	35.00
SuA:						
Surrency	6w	---	---	---	---	---
Ud.						
Udorthents						
W.						
Water						

Table 6.--Prime Farmland and Other Important Farmland

(Only the soils considered prime or important farmland are listed. Urban or built-up areas of the soils listed are not considered prime or important farmland)

Map symbol	Map unit name	Farmland classification
CnA	Clarendon loamy sand, 0 to 2 percent slopes	All areas are prime farmland
DcA	Dothan-Clarendon complex, 0 to 2 percent slopes	All areas are prime farmland
EuA	Eulonia sandy loam, 0 to 2 percent slopes	All areas are prime farmland
FuA	Fuquay loamy sand, 0 to 2 percent slopes	Farmland of statewide importance
LeA	Leefield loamy sand, 0 to 2 percent slopes	Farmland of statewide importance
RgA	Rigdon sand, 0 to 2 percent slopes	Farmland of statewide importance
StA	Stilson loamy sand, 0 to 2 percent slopes	Farmland of statewide importance

Table 7.--Forestland Productivity

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Potential for seedling mortality		Potential productivity			Trees to manage
	Rating class and limiting features	Value	Common trees	Site index	Volume of wood fiber	
					cu ft/ac	
AbA:						
Albany	Moderate Wetness	0.50	loblolly pine	95	143	loblolly pine, slash pine
			longleaf pine	80	100	
			slash pine	85	157	
BdA:						
Bladen	High Wetness	1.00	loblolly pine	94	143	loblolly pine, longleaf pine
			sweetgum	90	100	
BfB:						
Blanton	Low		longleaf pine	70	86	loblolly pine, longleaf pine
			loblolly pine	85	114	
			southern red oak	---	---	
			bluejack oak	---	---	
			turkey oak	---	---	
			live oak	---	---	
Foxworth	Low		bluejack oak	---	0	longleaf pine, sand pine
			laurel oak	---	0	
			live oak	---	0	
			longleaf pine	65	72	
			post oak	---	0	
			slash pine	80	143	
			turkey oak	---	0	
BuB:						
Blanton	Low		longleaf pine	70	86	loblolly pine, longleaf pine
			loblolly pine	85	114	
			southern red oak	---	---	
			bluejack oak	---	---	
			turkey oak	---	---	
			live oak	---	---	
Fuquay	Low		hickory	---	0	loblolly pine, longleaf pine, slash pine
			loblolly pine	88	129	
			longleaf pine	84	114	
			slash pine	92	172	
			water oak	---	0	
Urban land.						
CAA:						
Chastain	High Wetness	1.00	sweetgum	95	122	eastern cottonwood, sweetgum, yellow-poplar
			baldcypress	---	---	
			water tupelo	---	---	
			water oak	---	---	
Tawcaw	Low		sweetgum	95	114	eastern cottonwood, sweetgum, yellow-poplar
			water oak	---	0	
			water tupelo	---	0	

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential for seedling mortality		Potential productivity			Trees to manage
	Rating class and limiting features	Value	Common trees	Site index	Volume of wood fiber	
					cu ft/ac	
ChA:						
Chipley	Low		blackjack oak	90	---	longleaf pine, slash pine
			loblolly pine	90	---	
			longleaf pine	80	---	
			post oak	---	---	
			turkey oak	---	---	
CnA:						
Clarendon	Low		hickory	---	0	loblolly pine, longleaf pine, slash pine
			loblolly pine	88	129	
			longleaf pine	84	114	
			slash pine	92	172	
DaA:						
Dasher	High		baldcypress	---	0	---
	Wetness	1.00	pond pine	---	0	
	Soil reaction	0.50	water tupelo	---	0	
DcA:						
Dothan	Low		hickory	---	0	loblolly pine, longleaf pine, slash pine
			loblolly pine	88	129	
			longleaf pine	84	114	
			slash pine	92	172	
			water oak	---	0	
Clarendon	Low		hickory	---	0	loblolly pine, longleaf pine, slash pine
			loblolly pine	88	129	
			longleaf pine	84	114	
			slash pine	92	172	
EcA:						
Echaw	Low		---	---	---	loblolly pine, slash pine
Centenary	Low		loblolly pine	85	114	loblolly pine, sand pine, slash pine
			longleaf pine	72	86	
			slash pine	85	157	
EuA:						
Eulonia	Low		blackgum	---	0	loblolly pine, slash pine
			hickory	---	0	
			loblolly pine	90	129	
			longleaf pine	85	114	
			southern red oak	---	0	
			sweetgum	90	100	
			water oak	90	86	
Bladen	High		loblolly pine	94	143	loblolly pine, longleaf pine
	Wetness	1.00	sweetgum	90	100	
FoA:						
Foxworth	Low		bluejack oak	---	0	longleaf pine, sand pine
			laurel oak	---	0	
			live oak	---	0	
			longleaf pine	65	72	
			post oak	---	0	
			slash pine	80	143	
			turkey oak	---	0	

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential for seedling mortality		Potential productivity			Trees to manage
	Rating class and limiting features	Value	Common trees	Site index	Volume of wood fiber	
					cu ft/ac	
FuA:						
Fuquay	Low		hickory	---	0	loblolly pine,
			loblolly pine	88	129	longleaf pine,
			longleaf pine	84	114	slash pine
			slash pine	92	172	
			water oak	---	0	
LeA:						
Leefield	Low		---	---	---	loblolly pine, longleaf pine, slash pine
Pelham	High		blackgum	80	114	loblolly pine
	Wetness	1.00	loblolly pine	90	129	
			longleaf pine	80	100	
			sweetgum	80	86	
			water oak	80	72	
LnA:						
Leon	High		loblolly pine	75	100	slash pine
	Wetness	1.00	longleaf pine	70	86	
			slash pine	80	143	
Pelham	High		blackgum	80	114	loblolly pine
	Wetness	1.00	loblolly pine	90	129	
			longleaf pine	80	100	
			sweetgum	80	86	
			water oak	80	72	
LvA:						
Levy	High		sweetgum	85	86	---
	Wetness	1.00				
MaA:						
Mascotte	High		loblolly pine	80	---	loblolly pine,
	Wetness	1.00	longleaf pine	70	---	slash pine
			slash pine	85	---	
Pelham	High		blackgum	80	114	loblolly pine
	Wetness	1.00	loblolly pine	90	129	
			longleaf pine	80	100	
			sweetgum	80	86	
			water oak	80	72	
MeA:						
Meldrim	Low		bluejack oak	---	0	loblolly pine,
			live oak	---	0	longleaf pine
			loblolly pine	85	114	
			longleaf pine	70	86	
			southern red oak	---	0	
			turkey oak	---	0	
PeA:						
Pelham	High		blackgum	80	114	loblolly pine
	Wetness	1.00	loblolly pine	90	129	
			longleaf pine	80	100	
			sweetgum	80	86	
			water oak	80	72	

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential for seedling mortality		Potential productivity			Trees to manage
	Rating class and limiting features	Value	Common trees	Site index	Volume of wood fiber	
					cu ft/ac	
PkA:						
Pickney	High		baldcypress	---	0	---
	Wetness	1.00	blackgum	---	0	
			pond pine	---	0	
			sweetgum	90	100	
			water oak	---	0	
			water tupelo	---	0	
			yellow-poplar	---	0	
RaA:						
Rains	High		loblolly pine	94	143	loblolly pine
	Wetness	1.00	sweetgum	90	131	
RbF:						
Remlik	High		longleaf pine	63	63	longleaf pine,
	Available water	1.00	loblolly pine	88	127	loblolly pine
			blackjack oak	---	---	
Blanton	Moderate		longleaf pine	70	86	loblolly pine,
	Available water	0.50	loblolly pine	85	114	longleaf pine
			southern red oak	---	---	
			bluejack oak	---	---	
			turkey oak	---	---	
			live oak	---	---	
RdA:						
Ridgeland	Low		blackgum	---	0	loblolly pine,
			loblolly pine	80	114	longleaf pine
			longleaf pine	70	86	
			pond pine	---	0	
Boulogne	High		loblolly pine	75	100	loblolly pine
	Wetness	1.00	longleaf pine	70	86	
			water oak	---	0	
RgA:						
Rigdon	Low		loblolly pine	90	129	loblolly pine,
			longleaf pine	70	86	longleaf pine, slash pine
RmA:						
Rigdon	Low		loblolly pine	90	129	loblolly pine,
			longleaf pine	70	86	longleaf pine, slash pine
Mascotte	High		loblolly pine	80	---	loblolly pine,
	Wetness	1.00	longleaf pine	70	---	slash pine
			slash pine	85	---	
Urban land.						
StA:						
Stilson	Low		loblolly pine	95	129	loblolly pine,
			longleaf pine	80	100	longleaf pine,
			slash pine	95	172	slash pine
			sweetgum	---	0	

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential for seedling mortality		Potential productivity			Trees to manage
	Rating class and limiting features	Value	Common trees	Site index	Volume of wood fiber	
					cu ft/ac	
SuA:						
Surrency	High Wetness	1.00	blackgum	---	0	loblolly pine
			cypress	---	0	
			loblolly pine	95	143	
			sweetgum	90	100	
			water oak	---	0	
			water tupelo	---	0	
Ud. Udorthents						
W. Water						

Table 8.--Forestland Management, Part I

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.1 to 1.0. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Suitability for log landings		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AbA:						
Albany	Moderately suited		Slight		Moderately suited	
	Sandiness	0.50			Sandiness	0.50
BdA:						
Bladen	Moderately suited		Slight		Moderately suited	
	Wetness	0.50			Wetness	0.50
BfB:						
Blanton	Moderately suited		Slight		Moderately suited	
	Sandiness	0.50			Sandiness	0.50
Foxworth	Moderately suited		Slight		Moderately suited	
	Sandiness	0.50			Sandiness	0.50
BuB:						
Blanton	Moderately suited		Slight		Moderately suited	
	Sandiness	0.50			Sandiness	0.50
Fuquay	Well suited		Slight		Well suited	
Urban land	Not rated		Not rated		Not rated	
CAA:						
Chastain	Poorly suited		Slight		Poorly suited	
	Flooding	1.00			Flooding	1.00
	Low strength	0.50			Low strength	0.50
	Wetness	0.50			Wetness	0.50
Tawcaw	Poorly suited		Slight		Poorly suited	
	Flooding	1.00			Flooding	1.00
	Low strength	0.50			Low strength	0.50
	Wetness	0.50			Wetness	0.50
ChA:						
Chipley	Moderately suited		Slight		Moderately suited	
	Sandiness	0.50			Sandiness	0.50
CnA:						
Clarendon	Well suited		Slight		Well suited	
DaA:						
Dasher	Poorly suited		Slight		Poorly suited	
	Ponding	1.00			Ponding	1.00
	Low strength	1.00			Low strength	1.00
	Wetness	1.00			Wetness	1.00
DcA:						
Dothan	Well suited		Slight		Well suited	
Clarendon	Well suited		Slight		Well suited	
EcA:						
Echaw	Moderately suited		Slight		Moderately suited	
	Sandiness	0.50			Sandiness	0.50

Table 8.--Forestland Management, Part I--Continued

Map symbol and soil name	Suitability for log landings		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Centenary	Moderately suited		Slight		Moderately suited	
	Sandiness	0.50			Sandiness	0.50
EuA:						
Eulonia	Well suited		Slight		Well suited	
Bladen	Moderately suited		Slight		Moderately suited	
	Wetness	0.50			Wetness	0.50
FoA:						
Foxworth	Moderately suited		Slight		Moderately suited	
	Sandiness	0.50			Sandiness	0.50
FuA:						
Fuquay	Well suited		Slight		Well suited	
LeA:						
Leefield	Well suited		Slight		Well suited	
Pelham	Well suited		Slight		Well suited	
LnA:						
Leon	Moderately suited		Slight		Moderately suited	
	Wetness	0.50			Wetness	0.50
	Sandiness	0.50			Sandiness	0.50
Pelham	Well suited		Slight		Well suited	
LvA:						
Levy	Poorly suited		Slight		Poorly suited	
	Flooding	1.00			Flooding	1.00
	Wetness	1.00			Wetness	1.00
	Low strength	0.50			Low strength	0.50
MaA:						
Mascotte	Moderately suited		Slight		Moderately suited	
	Wetness	0.50			Wetness	0.50
Pelham	Well suited		Slight		Well suited	
MeA:						
Meldrim	Moderately suited		Slight		Moderately suited	
	Sandiness	0.50			Sandiness	0.50
PeA:						
Pelham	Well suited		Slight		Well suited	
PkA:						
Pickney	Poorly suited		Slight		Poorly suited	
	Ponding	1.00			Ponding	1.00
	Flooding	1.00			Flooding	1.00
	Wetness	1.00			Wetness	1.00
RaA:						
Rains	Moderately suited		Slight		Moderately suited	
	Wetness	0.50			Wetness	0.50
RbF:						
Remlik	Poorly suited		Severe		Poorly suited	
	Slope	1.00	Slope/erodibility	0.95	Slope	1.00
	Sandiness	0.50			Sandiness	0.50

Table 8.--Forestland Management, Part I--Continued

Map symbol and soil name	Suitability for log landings		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Blanton	Poorly suited		Severe		Poorly suited	
	Slope	1.00	Slope/erodibility	0.95	Slope	1.00
	Sandiness	0.50			Sandiness	0.50
RdA:						
Ridgeland	Moderately suited		Slight		Moderately suited	
	Sandiness	0.50			Sandiness	0.50
Boulogne	Moderately suited		Slight		Moderately suited	
	Wetness	0.50			Wetness	0.50
	Sandiness	0.50			Sandiness	0.50
RgA:						
Rigdon	Moderately suited		Slight		Moderately suited	
	Sandiness	0.50			Sandiness	0.50
RmA:						
Rigdon	Moderately suited		Slight		Moderately suited	
	Sandiness	0.50			Sandiness	0.50
Mascotte	Moderately suited		Slight		Moderately suited	
	Wetness	0.50			Wetness	0.50
Urban land	Not rated		Not rated		Not rated	
StA:						
Stilson	Well suited		Slight		Well suited	
SuA:						
Surrency	Poorly suited		Slight		Poorly suited	
	Ponding	1.00			Ponding	1.00
	Flooding	1.00			Flooding	1.00
	Wetness	1.00			Wetness	1.00
	Sandiness	0.50			Sandiness	0.50
Ud:						
Udorthents	Not rated		Not rated		Not rated	
W:						
Water	Not rated		Not rated		Not rated	

Table 8.--Forestland Management, Part II

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AbA:							
Albany	90	Moderately suited		Moderately suited		Moderately suited	
		Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
BdA:							
Bladen	80	Well suited		Well suited		Well suited	
BfB:							
Blanton	70	Moderately suited		Moderately suited		Moderately suited	
		Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
Foxworth	20	Moderately suited		Moderately suited		Moderately suited	
		Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
BuB:							
Blanton	40	Moderately suited		Moderately suited		Moderately suited	
		Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
Fuquay	30	Well suited		Well suited		Well suited	
Urban land	30	Not rated		Not rated		Not rated	
CAA:							
Chastain	60	Moderately suited		Moderately suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50	Low strength	0.50
Tawcaw	30	Moderately suited		Moderately suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50	Low strength	0.50
ChA:							
Chipley	70	Moderately suited		Moderately suited		Moderately suited	
		Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
CnA:							
Clarendon	70	Well suited		Well suited		Well suited	
DaA:							
Dasher	100	Moderately suited		Poorly suited		Poorly suited	
		Wetness	0.50	Wetness	0.75	Low strength	1.00
		Sandiness	0.50	Sandiness	0.50	Wetness	1.00
DcA:							
Dothan	60	Well suited		Well suited		Well suited	
Clarendon	30	Well suited		Well suited		Well suited	
EcA:							
Echaw	55	Moderately suited		Moderately suited		Moderately suited	
		Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
Centenary	35	Moderately suited		Moderately suited		Moderately suited	
		Sandiness	0.50	Sandiness	0.50	Sandiness	0.50

Table 8.--Forestland Management, Part II--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Suitability for use of harvesting equipment: Rating class and limiting features	Value
EuA:							
Eulonia	80	Well suited		Well suited		Well suited	
Bladen	5	Well suited		Well suited		Well suited	
FoA:							
Foxworth	90	Moderately suited		Moderately suited		Moderately suited	
		Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
FuA:							
Fuquay	80	Well suited		Well suited		Well suited	
LeA:							
Leefield	85	Well suited		Well suited		Well suited	
Pelham	3	Well suited		Well suited		Poorly suited	
						Wetness	1.00
LnA:							
Leon	85	Moderately suited		Moderately suited		Moderately suited	
		Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
Pelham	5	Well suited		Well suited		Poorly suited	
						Wetness	1.00
LvA:							
Levy	90	Poorly suited		Poorly suited		Poorly suited	
		Stickiness; high plasticity index	0.75	Wetness	0.75	Wetness	1.00
		Wetness	0.50	Stickiness; high plasticity index	0.75	Low strength	0.50
MaA:							
Mascotte	75	Well suited		Well suited		Well suited	
Pelham	10	Well suited		Well suited		Poorly suited	
						Wetness	1.00
MeA:							
Meldrim	70	Moderately suited		Moderately suited		Moderately suited	
		Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
PeA:							
Pelham	80	Well suited		Well suited		Poorly suited	
						Wetness	1.00
PkA:							
Pickney	85	Well suited		Well suited		Well suited	
RaA:							
Rains	80	Well suited		Well suited		Well suited	
RbF:							
Remlik	55	Moderately suited		Poorly suited		Moderately suited	
		Sandiness	0.50	Slope	0.75	Slope	0.50
				Sandiness	0.50	Sandiness	0.50
Blanton	20	Moderately suited		Poorly suited		Moderately suited	
		Sandiness	0.50	Slope	0.75	Slope	0.50
				Sandiness	0.50	Sandiness	0.50

Table 8.--Forestland Management, Part II--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
RdA:							
Ridgeland	65	Moderately suited		Moderately suited		Moderately suited	
		Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
Boulogne	20	Moderately suited		Moderately suited		Poorly suited	
		Sandiness	0.50	Sandiness	0.50	Wetness	1.00
						Sandiness	0.50
RgA:							
Rigdon	80	Moderately suited		Moderately suited		Moderately suited	
		Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
RmA:							
Rigdon	40	Moderately suited		Moderately suited		Moderately suited	
		Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
Mascotte	30	Well suited		Well suited		Well suited	
Urban land	25	Not rated		Not rated		Not rated	
StA:							
Stilson	85	Well suited		Well suited		Well suited	
SuA:							
Surrency	85	Moderately suited		Poorly suited		Poorly suited	
		Wetness	0.50	Wetness	0.75	Wetness	1.00
		Sandiness	0.50	Sandiness	0.50	Sandiness	0.50
Ud:							
Udorthents	100	Not rated		Not rated		Not rated	
W:							
Water	100	Not rated		Not rated		Not rated	

Table 9.--Recreational Development, Part I

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Camp areas		Picnic areas	
	Rating class and limiting features	Value	Rating class and limiting features	Value
AbA:				
Albany	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too sandy	1.00	Too sandy	1.00
BdA:				
Bladen	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	0.96	Slow water movement	0.96
BfB:				
Blanton	Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00
Foxworth	Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00
BuB:				
Blanton	Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00
Fuquay	Somewhat limited		Somewhat limited	
	Too sandy	0.60	Too sandy	0.60
Urban land	Not rated		Not rated	
CAA:				
Chastain	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Slow water movement	0.94
	Slow water movement	0.94	Flooding	0.40
Tawcaw	Very limited		Somewhat limited	
	Flooding	1.00	Slow water movement	0.94
	Depth to saturated zone	0.98	Depth to saturated zone	0.75
	Slow water movement	0.94	Flooding	0.40
ChA:				
Chipley	Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00
	Depth to saturated zone	0.39	Depth to saturated zone	0.19
CnA:				
Clarendon	Somewhat limited		Somewhat limited	
	Slow water movement	0.60	Slow water movement	0.60
	Depth to saturated zone	0.39	Depth to saturated zone	0.19

Table 9.--Recreational Development, Part I--Continued

Map symbol and soil name	Camp areas		Picnic areas	
	Rating class and limiting features	Value	Rating class and limiting features	Value
DaA:				
Dasher	Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00
	Ponding	1.00	Depth to saturated zone	1.00
DcA:				
Dothan	Not limited		Not limited	
Clarendon	Somewhat limited		Somewhat limited	
	Slow water movement	0.60	Slow water movement	0.60
	Depth to saturated zone	0.39	Depth to saturated zone	0.19
EcA:				
Echaw	Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00
Centenary	Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00
EuA:				
Eulonia	Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	0.75
	Slow water movement	0.26	Slow water movement	0.26
Bladen	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	0.96	Slow water movement	0.96
FoA:				
Foxworth	Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00
FuA:				
Fuquay	Somewhat limited		Somewhat limited	
	Too sandy	0.60	Too sandy	0.60
LeA:				
Leefield	Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.90	Too sandy	0.80
	Too sandy	0.80	Depth to saturated zone	0.60
	Slow water movement	0.15	Slow water movement	0.15
Pelham	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too sandy	0.76	Too sandy	0.76
LnA:				
Leon	Very limited		Very limited	
	Depth to saturated zone	1.00	Too sandy	1.00
	Too sandy	1.00	Depth to saturated zone	1.00
Pelham	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too sandy	0.76	Too sandy	0.76

Table 9.--Recreational Development, Part I--Continued

Map symbol and soil name	Camp areas		Picnic areas	
	Rating class and limiting features	Value	Rating class and limiting features	Value
LvA:				
Levy	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Slow water movement	0.94
	Slow water movement	0.94	Flooding	0.60
MaA:				
Mascotte	Very limited		Very limited	
	Depth to saturated zone	1.00	Too sandy	1.00
	Too sandy	1.00	Depth to saturated zone	1.00
	Slow water movement	0.15	Slow water movement	0.15
MaA:				
Pelham	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too sandy	0.76	Too sandy	0.76
MeA:				
Meldrim	Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00
PeA:				
Pelham	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too sandy	0.76	Too sandy	0.76
PkA:				
Pickney	Very limited		Very limited	
	Depth to saturated zone	1.00	Too sandy	1.00
	Flooding	1.00	Ponding	1.00
	Ponding	1.00	Depth to saturated zone	1.00
	Too sandy	1.00	Flooding	0.40
RaA:				
Rains	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
RbF:				
Remlik	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Slow water movement	0.94	Slow water movement	0.94
	Too sandy	0.79	Too sandy	0.79
Blanton	Very limited		Very limited	
	Slope	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	1.00
RdA:				
Ridgeland	Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00
	Depth to saturated zone	0.98	Depth to saturated zone	0.75

Table 9.--Recreational Development, Part I--Continued

Map symbol and soil name	Camp areas		Picnic areas	
	Rating class and limiting features	Value	Rating class and limiting features	Value
Boulogne	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too sandy	1.00	Too sandy	1.00
RgA:				
Rigdon	Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00
	Depth to saturated zone	0.98	Depth to saturated zone	0.75
RmA:				
Rigdon	Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00
	Depth to saturated zone	0.98	Depth to saturated zone	0.75
Mascotte	Very limited		Very limited	
	Depth to saturated zone	1.00	Too sandy	1.00
	Too sandy	1.00	Depth to saturated zone	1.00
	Slow water movement	0.15	Slow water movement	0.15
Urban land	Not rated		Not rated	
StA:				
Stilson	Somewhat limited		Somewhat limited	
	Too sandy	0.60	Too sandy	0.60
	Slow water movement	0.15	Slow water movement	0.15
SuA:				
Surrency	Very limited		Very limited	
	Depth to saturated zone	1.00	Too sandy	1.00
	Flooding	1.00	Ponding	1.00
	Ponding	1.00	Depth to saturated zone	1.00
	Too sandy	1.00	Flooding	0.40
	Slow water movement	0.26	Slow water movement	0.26
Ud:				
Udorthents	Not rated		Not rated	
W:				
Water	Not rated		Not rated	

Table 9.--Recreational Development, Part II

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Playgrounds		Paths and trails	
	Rating class and limiting features	Value	Rating class and limiting features	Value
AbA:				
Albany	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too sandy	1.00	Too sandy	1.00
BdA:				
Bladen	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	0.96		
BfB:				
Blanton	Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00
Foxworth	Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00
BuB:				
Blanton	Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00
Fuquay	Somewhat limited		Somewhat limited	
	Too sandy	0.60	Too sandy	0.60
Urban land	Not rated		Not rated	
CAA:				
Chastain	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	0.40
	Slow water movement	0.94		
Tawcaw	Very limited		Somewhat limited	
	Flooding	1.00	Depth to saturated zone	0.44
	Depth to saturated zone	0.98	Flooding	0.40
	Slow water movement	0.94		
ChA:				
Chipley	Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00
	Depth to saturated zone	0.39		
CnA:				
Clarendon	Somewhat limited		Not limited	
	Slow water movement	0.60		
	Depth to saturated zone	0.39		

Table 9.--Recreational Development, Part II--Continued

Map symbol and soil name	Playgrounds		Paths and trails	
	Rating class and limiting features	Value	Rating class and limiting features	Value
DaA:				
Dasher	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00
DcA:				
Dothan	Not limited		Not limited	
Clarendon	Somewhat limited		Not limited	
	Slow water movement	0.60		
	Depth to saturated zone	0.39		
EcA:				
Echaw	Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00
Centenary	Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00
EuA:				
Eulonia	Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	0.44
	Slow water movement	0.26		
Bladen	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slow water movement	0.96		
FoA:				
Foxworth	Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00
FuA:				
Fuquay	Somewhat limited		Somewhat limited	
	Too sandy	0.60	Too sandy	0.60
LeA:				
Leefield	Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.90	Too sandy	0.80
	Too sandy	0.80	Depth to saturated zone	0.22
	Slow water movement	0.15		
Pelham	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too sandy	0.76	Too sandy	0.76
LnA:				
Leon	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too sandy	1.00	Too sandy	1.00
Pelham	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too sandy	0.76	Too sandy	0.76

Table 9.--Recreational Development, Part II--Continued

Map symbol and soil name	Playgrounds		Paths and trails	
	Rating class and limiting features	Value	Rating class and limiting features	Value
LvA:				
Levy	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	0.60
	Slow water movement	0.94		
MaA:				
Mascotte	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too sandy	1.00	Too sandy	1.00
	Slow water movement	0.15		
MaA:				
Pelham	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too sandy	0.76	Too sandy	0.76
MeA:				
Meldrim	Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00
PeA:				
Pelham	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too sandy	0.76	Too sandy	0.76
PkA:				
Pickney	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too sandy	1.00	Too sandy	1.00
	Flooding	1.00	Ponding	1.00
	Ponding	1.00	Flooding	0.40
RaA:				
Rains	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
RbF:				
Remlik	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Slow water movement	0.94	Too sandy	0.79
	Too sandy	0.79		
	Gravel content	0.06		
Blanton	Very limited		Very limited	
	Slope	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	1.00
RdA:				
Ridgeland	Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00
	Depth to saturated zone	0.98	Depth to saturated zone	0.44

Table 9.--Recreational Development, Part II--Continued

Map symbol and soil name	Playgrounds		Paths and trails	
	Rating class and limiting features	Value	Rating class and limiting features	Value
Boulogne	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too sandy	1.00	Too sandy	1.00
RgA:				
Rigdon	Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00
	Depth to saturated zone	0.98	Depth to saturated zone	0.44
RmA:				
Rigdon	Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00
	Depth to saturated zone	0.98	Depth to saturated zone	0.44
Mascotte	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too sandy	1.00	Too sandy	1.00
	Slow water movement	0.15		
Urban land	Not rated		Not rated	
StA:				
Stilson	Somewhat limited		Somewhat limited	
	Too sandy	0.60	Too sandy	0.60
	Slow water movement	0.15		
SuA:				
Surrency	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too sandy	1.00	Too sandy	1.00
	Flooding	1.00	Ponding	1.00
	Ponding	1.00	Flooding	0.40
	Slow water movement	0.26		
Ud:				
Udorthents	Not rated		Not rated	
W:				
Water	Not rated		Not rated	

Table 10.--Building Site Development, Part I

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Dwellings without basements		Dwellings with basements	
	Rating class and limiting features	Value	Rating class and limiting features	Value
AbA:				
Albany	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
BdA:				
Bladen	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	0.50	Shrink-swell	0.50
BfB:				
Blanton	Not limited		Somewhat limited	
			Depth to saturated zone	0.15
Foxworth	Not limited		Somewhat limited	
			Depth to saturated zone	0.61
BuB:				
Blanton	Not limited		Somewhat limited	
			Depth to saturated zone	0.15
Fuquay	Not limited		Somewhat limited	
			Depth to saturated zone	0.61
Urban land	Not rated		Not rated	
CAA:				
Chastain	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	0.50	Shrink-swell	0.50
Tawcaw	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	0.98	Depth to saturated zone	1.00
	Shrink-swell	0.50	Shrink-swell	0.50
ChA:				
Chipley	Somewhat limited		Very limited	
	Depth to saturated zone	0.39	Depth to saturated zone	1.00
CnA:				
Clarendon	Somewhat limited		Very limited	
	Depth to saturated zone	0.39	Depth to saturated zone	1.00

Table 10.--Building Site Development, Part I--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements	
	Rating class and limiting features	Value	Rating class and limiting features	Value
DaA:				
Dasher	Very limited		Very limited	
	Ponding	1.00	Ponding	1.00
	Subsidence	1.00	Subsidence	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Organic matter content	1.00	Organic matter content	1.00
DcA:				
Dothan	Not limited		Somewhat limited	
			Depth to saturated zone	0.95
Clarendon	Somewhat limited		Very limited	
	Depth to saturated zone	0.39	Depth to saturated zone	1.00
EcA:				
Echaw	Not limited		Somewhat limited	
			Depth to saturated zone	0.99
Centenary	Not limited		Somewhat limited	
			Depth to saturated zone	0.82
EuA:				
Eulonia	Somewhat limited		Very limited	
	Depth to saturated zone	0.98	Depth to saturated zone	1.00
Bladen	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	0.50	Shrink-swell	0.50
FoA:				
Foxworth	Not limited		Somewhat limited	
			Depth to saturated zone	0.61
FuA:				
Fuquay	Not limited		Somewhat limited	
			Depth to saturated zone	0.61
LeA:				
Leefield	Somewhat limited		Very limited	
	Depth to saturated zone	0.90	Depth to saturated zone	1.00
Pelham	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
LnA:				
Leon	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Table 10.--Building Site Development, Part I--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements	
	Rating class and limiting features	Value	Rating class and limiting features	Value
Pelham	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
LvA:				
Levy	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	1.00	Shrink-swell	1.00
MaA:				
Mascotte	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Pelham	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
MeA:				
Meldrim	Not limited		Somewhat limited	
			Depth to saturated zone	0.99
PeA:				
Pelham	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
PkA:				
Pickney	Very limited		Very limited	
	Ponding	1.00	Ponding	1.00
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
RaA:				
Rains	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
RbF:				
Remlik	Very limited		Very limited	
	Slope	1.00	Slope	1.00
Blanton	Very limited		Very limited	
	Slope	1.00	Slope	1.00
			Depth to saturated zone	0.15
RdA:				
Ridgeland	Somewhat limited		Very limited	
	Depth to saturated zone	0.98	Depth to saturated zone	1.00
Boulogne	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Table 10.--Building Site Development, Part I--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements	
	Rating class and limiting features	Value	Rating class and limiting features	Value
RgA:				
Rigdon	Somewhat limited		Very limited	
	Depth to saturated zone	0.98	Depth to saturated zone	1.00
RmA:				
Rigdon	Somewhat limited		Very limited	
	Depth to saturated zone	0.98	Depth to saturated zone	1.00
Mascotte	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Urban land	Not rated		Not rated	
StA:				
Stilson	Not limited		Somewhat limited	
			Depth to saturated zone	0.99
SuA:				
Surrency	Very limited		Very limited	
	Ponding	1.00	Ponding	1.00
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Ud:				
Udorthents	Not rated		Not rated	
W:				
Water	Not rated		Not rated	

Table 10.--Building Site Development, Part II

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Local roads and streets		Shallow excavations	
	Rating class and limiting features	Value	Rating class and limiting features	Value
AbA:				
Albany	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Cutbanks cave	1.00
BdA:				
Bladen	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Low strength	1.00	Too clayey	0.50
	Shrink-swell	0.50	Cutbanks cave	0.10
BfB:				
Blanton	Not limited		Very limited	
			Cutbanks cave	1.00
			Depth to saturated zone	0.15
Foxworth	Not limited		Very limited	
			Cutbanks cave	1.00
			Depth to saturated zone	0.61
BuB:				
Blanton	Not limited		Very limited	
			Cutbanks cave	1.00
			Depth to saturated zone	0.15
Fuquay	Not limited		Very limited	
			Cutbanks cave	1.00
			Depth to saturated zone	0.61
Urban land	Not rated		Not rated	
CAA:				
Chastain	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Cutbanks cave	1.00
	Low strength	1.00	Flooding	0.80
	Shrink-swell	0.50	Too clayey	0.50
Tawcaw	Very limited		Very limited	
	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	0.75	Cutbanks cave	1.00
	Shrink-swell	0.50	Flooding	0.80
	Low strength	0.50		

Table 10.--Building Site Development, Part II--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations	
	Rating class and limiting features	Value	Rating class and limiting features	Value
ChA:				
Chipley	Somewhat limited		Very limited	
	Depth to saturated zone	0.19	Depth to saturated zone	1.00
			Cutbanks cave	1.00
CnA:				
Clarendon	Somewhat limited		Very limited	
	Depth to saturated zone	0.19	Depth to saturated zone	1.00
			Cutbanks cave	0.10
DaA:				
Dasher	Very limited		Very limited	
	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Subsidence	1.00	Organic matter content	1.00
DcA:				
Dothan	Not limited		Somewhat limited	
			Depth to saturated zone	0.95
			Cutbanks cave	0.10
Clarendon	Somewhat limited		Very limited	
	Depth to saturated zone	0.19	Depth to saturated zone	1.00
			Cutbanks cave	0.10
EcA:				
Echaw	Not limited		Very limited	
			Cutbanks cave	1.00
			Depth to saturated zone	0.99
Centenary	Not limited		Very limited	
			Cutbanks cave	1.00
			Depth to saturated zone	0.82
EuA:				
Eulonia	Somewhat limited		Very limited	
	Depth to saturated zone	0.75	Depth to saturated zone	1.00
			Cutbanks cave	0.10
Bladen	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Low strength	1.00	Too clayey	0.50
	Shrink-swell	0.50	Cutbanks cave	0.10
FoA:				
Foxworth	Not limited		Very limited	
			Cutbanks cave	1.00
			Depth to saturated zone	0.61

Table 10.--Building Site Development, Part II--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations	
	Rating class and limiting features	Value	Rating class and limiting features	Value
FuA:				
Fuquay	Not limited		Very limited	
			Cutbanks cave	1.00
			Depth to saturated zone	0.61
LeA:				
Leefield	Somewhat limited		Very limited	
	Depth to saturated zone	0.60	Depth to saturated zone	1.00
			Cutbanks cave	1.00
Pelham	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Cutbanks cave	1.00
LnA:				
Leon	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Cutbanks cave	1.00
LnA:				
Pelham	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Cutbanks cave	1.00
LvA:				
Levy	Very limited		Very limited	
	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	1.00	Depth to saturated zone	1.00
	Low strength	1.00	Too clayey	0.28
	Shrink-swell	1.00	Cutbanks cave	0.10
MaA:				
Mascotte	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Cutbanks cave	1.00
Pelham	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Cutbanks cave	1.00
MeA:				
Meldrim	Not limited		Very limited	
			Cutbanks cave	1.00
			Depth to saturated zone	0.99
PeA:				
Pelham	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Cutbanks cave	1.00

Table 10.--Building Site Development, Part II--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations	
	Rating class and limiting features	Value	Rating class and limiting features	Value
PkA:				
Pickney	Very limited		Very limited	
	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Cutbanks cave	1.00
			Flooding	0.80
RaA:				
Rains	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Cutbanks cave	0.10
RbF:				
Remlik	Very limited		Very limited	
	Slope	1.00	Slope	1.00
			Cutbanks cave	1.00
			Dense layer	0.50
Blanton	Very limited		Very limited	
	Slope	1.00	Slope	1.00
			Cutbanks cave	1.00
			Depth to saturated zone	0.15
RdA:				
Ridgeland	Somewhat limited		Very limited	
	Depth to saturated zone	0.75	Depth to saturated zone	1.00
			Cutbanks cave	1.00
RdA:				
Boulogne	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Cutbanks cave	1.00
RgA:				
Rigdon	Somewhat limited		Very limited	
	Depth to saturated zone	0.75	Depth to saturated zone	1.00
			Cutbanks cave	1.00
RmA:				
Rigdon	Somewhat limited		Very limited	
	Depth to saturated zone	0.75	Depth to saturated zone	1.00
			Cutbanks cave	1.00
Mascotte	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Cutbanks cave	1.00
Urban land	Not rated		Not rated	
StA:				
Stilson	Not limited		Very limited	
			Cutbanks cave	1.00
			Depth to saturated zone	0.99

Table 10.--Building Site Development, Part II--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations	
	Rating class and limiting features	Value	Rating class and limiting features	Value
SuA:				
Surrency	Very limited		Very limited	
	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Cutbanks cave	1.00
			Flooding	0.80
Ud:				
Udorthents	Not rated		Not rated	
W:				
Water	Not rated		Not rated	

Table 11.--Sanitary Facilities

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
AbA:					
Albany	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Slow water movement	0.68	Depth to saturated zone	1.00
BdA:					
Bladen	80	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Seepage	1.00
BfB:					
Blanton	70	Somewhat limited		Very limited	
		Slow water movement	0.68	Seepage	1.00
		Depth to saturated zone	0.40		
Foxworth	20	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to saturated zone	0.71
		Depth to saturated zone	0.99		
BuB:					
Blanton	40	Somewhat limited		Very limited	
		Slow water movement	0.68	Seepage	1.00
		Depth to saturated zone	0.40		
Fuquay	30	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Depth to saturated zone	0.99		
Urban land	30	Not rated		Not rated	
CAA:					
Chastain	60	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Slow water movement	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00		

Table 11.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Tawcaw	30	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Slow water movement	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00		
ChA:					
Chipley	70	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Filtering capacity	1.00		
CnA:					
Clarendon	70	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	1.00
DaA:					
Dasher	100	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00
		Subsidence	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
DcA:					
Dothan	60	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	1.00
		Seepage, bottom layer	1.00		
Clarendon	30	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	1.00
EcA:					
Echaw	55	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Filtering capacity	1.00		

Table 11.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Centenary----------	35	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	0.99
		Filtering capacity	1.00		
EuA:					
Eulonia----------	80	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	1.00
Bladen----------	5	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Seepage	1.00
FoA:					
Foxworth----------	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to saturated zone	0.71
		Depth to saturated zone	0.99		
FuA:					
Fuquay----------	80	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Depth to saturated zone	0.99		
LeA:					
Leefield----------	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
Pelham----------	3	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50		
LnA:					
Leon----------	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00

Table 11.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Pelham	5	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50		
LvA:					
Levy	90	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00		
MaA:					
Mascotte	75	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
Pelham	10	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50		
MeA:					
Meldrim	70	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Slow water movement	0.68	Depth to saturated zone	1.00
PeA:					
Pelham	80	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50		
PkA:					
Pickney	85	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Filtering capacity	1.00		

Table 11.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
RaA:					
Rains	80	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50	Seepage	1.00
RbF:					
Remlik	55	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
Blanton	20	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.68	Seepage	1.00
		Depth to saturated zone	0.40		
RdA:					
Ridgeland	65	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
Boulogne	20	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
RgA:					
Rigdon	80	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Slow water movement	0.50	Depth to saturated zone	1.00
RmA:					
Rigdon	40	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Slow water movement	0.50	Depth to saturated zone	1.00
Mascotte	30	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
Urban land	25	Not rated		Not rated	

Table 11.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
StA:					
Stilson	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00		
SuA:					
Surrency	85	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
Ud:					
Udorthents	100	Not rated		Not rated	
W:					
Water	100	Not rated		Not rated	

Table 12.--Construction Materials

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Potential source of sand		Potential source of roadfill		Potential source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AbA:						
Albany	Fair		Poor		Poor	
	Bottom layer	0.00	Wetness depth	0.00	Wetness depth	0.00
	Thickest layer	0.61			Too sandy	0.00
					Too acid	0.68
BdA:						
Bladen	Poor		Poor		Poor	
	Thickest layer	0.00	Wetness depth	0.00	Too clayey	0.00
	Bottom layer	0.00	Low strength	0.00	Wetness depth	0.00
			Shrink-swell	0.91	Too acid	0.68
BfB:						
Blanton	Fair		Good		Poor	
	Bottom layer	0.00			Too sandy	0.00
	Thickest layer	0.94			Too acid	0.98
Foxworth	Fair		Good		Poor	
	Thickest layer	0.85			Too sandy	0.00
	Bottom layer	0.85			Too acid	0.98
BuB:						
Blanton	Fair		Good		Poor	
	Bottom layer	0.00			Too sandy	0.00
	Thickest layer	0.94			Too acid	0.98
Fuquay	Poor		Good		Fair	
	Thickest layer	0.00			Too sandy	0.14
	Bottom layer	0.00			Too acid	0.98
Urban land	Not rated		Not rated		Not rated	
CAA:						
Chastain	Fair		Poor		Poor	
	Thickest layer	0.00	Wetness depth	0.00	Wetness depth	0.00
	Bottom layer	0.84	Low strength	0.00	Too clayey	0.00
			Shrink-swell	0.89	Too acid	0.68
Tawcaw	Poor		Fair		Poor	
	Thickest layer	0.00	Wetness depth	0.14	Too clayey	0.00
	Bottom layer	0.00	Low strength	0.50	Wetness depth	0.14
			Shrink-swell	0.96		
ChA:						
Chipley	Good		Fair		Poor	
	Bottom layer	0.85	Wetness depth	0.53	Too sandy	0.00
					Wetness depth	0.53
					Too acid	0.95
CnA:						
Clarendon	Poor		Fair		Fair	
	Thickest layer	0.00	Wetness depth	0.53	Wetness depth	0.53
	Bottom layer	0.00			Too acid	0.98

Table 12.--Construction Materials--Continued

Map symbol and soil name	Potential source of sand		Potential source of roadfill		Potential source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
DaA:						
Dasher	Poor		Poor		Poor	
	Thickest layer	0.00	Wetness depth	0.00	Wetness depth	0.00
	Bottom layer	0.00			Organic matter content high	0.00
	Organic matter content	0.00			Too acid	0.12
DcA:						
Dothan	Poor		Good		Fair	
	Thickest layer	0.00			Too acid	0.98
	Bottom layer	0.00				
Clarendon	Poor		Fair		Fair	
	Thickest layer	0.00	Wetness depth	0.53	Wetness depth	0.53
	Bottom layer	0.00			Too acid	0.98
EcA:						
Echaw	Good		Fair		Poor	
	Thickest layer	0.84	Wetness depth	0.89	Too sandy	0.00
					Wetness depth	0.89
					Too acid	0.92
Centenary	Good		Good		Poor	
					Too sandy	0.00
					Too acid	0.95
EuA:						
Eulonia	Poor		Fair		Poor	
	Thickest layer	0.00	Wetness depth	0.14	Too clayey	0.00
	Bottom layer	0.00			Wetness depth	0.14
					Too acid	0.68
Bladen	Poor		Poor		Poor	
	Thickest layer	0.00	Wetness depth	0.00	Too clayey	0.00
	Bottom layer	0.00	Low strength	0.00	Wetness depth	0.00
			Shrink-swell	0.91	Too acid	0.68
FoA:						
Foxworth	Fair		Good		Poor	
	Thickest layer	0.85			Too sandy	0.00
	Bottom layer	0.85			Too acid	0.98
FuA:						
Fuquay	Poor		Good		Fair	
	Thickest layer	0.00			Too sandy	0.14
	Bottom layer	0.00			Too acid	0.98
LeA:						
Leefield	Poor		Fair		Fair	
	Thickest layer	0.00	Wetness depth	0.22	Wetness depth	0.22
	Bottom layer	0.00			Too sandy	0.32
					Too acid	0.68
Pelham	Poor		Poor		Poor	
	Thickest layer	0.00	Wetness depth	0.00	Wetness depth	0.00
	Bottom layer	0.00			Too sandy	0.04
					Too acid	0.68

Table 12.--Construction Materials--Continued

Map symbol and soil name	Potential source of sand		Potential source of roadfill		Potential source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
LnA:						
Leon	Good		Poor		Poor	
	Bottom layer	0.85	Wetness depth	0.00	Too sandy	0.00
					Wetness depth	0.00
					Too acid	0.92
Pelham	Poor		Poor		Poor	
	Thickest layer	0.00	Wetness depth	0.00	Wetness depth	0.00
	Bottom layer	0.00			Too sandy	0.04
					Too acid	0.68
LvA:						
Levy	Poor		Poor		Poor	
	Thickest layer	0.00	Wetness depth	0.00	Too clayey	0.00
	Bottom layer	0.00	Low strength	0.00	Wetness depth	0.00
			Shrink-swell	0.12	Too acid	0.59
MaA:						
Mascotte	Fair		Poor		Poor	
	Bottom layer	0.00	Wetness depth	0.00	Wetness depth	0.00
	Thickest layer	0.40			Too sandy	0.00
					Too acid	0.59
Pelham	Poor		Poor		Poor	
	Thickest layer	0.00	Wetness depth	0.00	Wetness depth	0.00
	Bottom layer	0.00			Too sandy	0.04
					Too acid	0.68
MeA:						
Meldrim	Fair		Fair		Poor	
	Bottom layer	0.00	Wetness depth	0.89	Too sandy	0.00
	Thickest layer	0.85			Wetness depth	0.89
					Too acid	0.98
PeA:						
Pelham	Poor		Poor		Poor	
	Thickest layer	0.00	Wetness depth	0.00	Wetness depth	0.00
	Bottom layer	0.00			Too sandy	0.04
					Too acid	0.68
PkA:						
Pickney	Fair		Poor		Poor	
	Bottom layer	0.61	Wetness depth	0.00	Too sandy	0.00
	Thickest layer	0.64			Wetness depth	0.00
					Too acid	0.59
RaA:						
Rains	Poor		Poor		Poor	
	Thickest layer	0.00	Wetness depth	0.00	Wetness depth	0.00
	Bottom layer	0.00			Too sandy	0.04
					Too acid	0.92
RbF:						
Remlik	Poor		Poor		Poor	
	Thickest layer	0.00	Slope	0.00	Slope	0.00
	Bottom layer	0.00			Too sandy	0.02
					Too acid	0.88
					Rock fragments	0.97

Table 12.--Construction Materials--Continued

Map symbol and soil name	Potential source of sand		Potential source of roadfill		Potential source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Blanton	Fair		Poor		Poor	
	Bottom layer	0.00	Slope	0.00	Slope	0.00
	Thickest layer	0.94			Too sandy	0.00
					Too acid	0.98
RdA:						
Ridgeland	Good		Fair		Poor	
			Wetness depth	0.14	Too sandy	0.00
					Wetness depth	0.14
					Too acid	0.76
Boulogne	Good		Poor		Poor	
	Bottom layer	0.00	Wetness depth	0.00	Wetness depth	0.00
					Too sandy	0.00
					Too acid	0.76
RgA:						
Rigdon	Fair		Fair		Poor	
	Bottom layer	0.00	Wetness depth	0.14	Too sandy	0.00
	Thickest layer	0.61			Wetness depth	0.14
					Too acid	0.68
RmA:						
Rigdon	Fair		Fair		Poor	
	Bottom layer	0.00	Wetness depth	0.14	Too sandy	0.00
	Thickest layer	0.61			Wetness depth	0.14
					Too acid	0.68
RmA:						
Mascotte	Fair		Poor		Poor	
	Bottom layer	0.00	Wetness depth	0.00	Wetness depth	0.00
	Thickest layer	0.40			Too sandy	0.00
					Too acid	0.59
Urban land	Not rated		Not rated		Not rated	
StA:						
Stilson	Poor		Fair		Fair	
	Thickest layer	0.00	Wetness depth	0.89	Too sandy	0.32
	Bottom layer	0.00			Too acid	0.88
					Wetness depth	0.89
SuA:						
Surrency	Fair		Poor		Poor	
	Bottom layer	0.00	Wetness depth	0.00	Too sandy	0.00
	Thickest layer	0.85			Wetness depth	0.00
					Too acid	0.68
Ud:						
Udorthents	Not rated		Not rated		Not rated	
W:						
Water	Not rated		Not rated		Not rated	

Table 13.--Water Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees	
	Rating class and limiting features	Value	Rating class and limiting features	Value
AbA:				
Albany	Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00
			Seepage	0.36
BdA:				
Bladen	Not limited		Very limited	
			Depth to saturated zone	1.00
			Hard to pack	0.04
			Seepage	0.01
BfB:				
Blanton	Very limited		Somewhat limited	
	Seepage	1.00	Seepage	0.72
Foxworth	Very limited		Somewhat limited	
	Seepage	1.00	Seepage	0.64
BuB:				
Blanton	Very limited		Somewhat limited	
	Seepage	1.00	Seepage	0.72
Fuquay	Very limited		Somewhat limited	
	Seepage	1.00	Seepage	0.10
Urban land	Not limited		Not rated	
CAA:				
Chastain	Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00
			Seepage	0.64
			Piping	0.14
Tawcaw	Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00
			Piping	0.12
			Seepage	0.10
ChA:				
Chipley	Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	0.99
			Seepage	0.79
CnA:				
Clarendon	Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	0.99

Table 13.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees	
	Rating class and limiting features	Value	Rating class and limiting features	Value
DaA:				
Dasher	Very limited		Not rated	
	Seepage	1.00		
DcA:				
Dothan	Very limited		Somewhat limited	
	Seepage	1.00	Depth to saturated zone	0.46
			Seepage	0.01
DcA:				
Clarendon	Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	0.99
EcA:				
Echaw	Very limited		Somewhat limited	
	Seepage	1.00	Seepage	0.86
			Depth to saturated zone	0.86
Centenary	Very limited		Somewhat limited	
	Seepage	1.00	Seepage	0.86
			Depth to saturated zone	0.09
EuA:				
Eulonia	Somewhat limited		Very limited	
	Seepage	0.70	Depth to saturated zone	1.00
Bladen	Not limited		Very limited	
			Depth to saturated zone	1.00
			Hard to pack	0.04
			Seepage	0.01
FoA:				
Foxworth	Very limited		Somewhat limited	
	Seepage	1.00	Seepage	0.64
FuA:				
Fuquay	Very limited		Somewhat limited	
	Seepage	1.00	Seepage	0.10
LeA:				
Leefield	Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00
			Seepage	0.11
Pelham	Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00
			Seepage	0.10
LnA:				
Leon	Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00
			Seepage	0.79

Table 13.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees	
	Rating class and limiting features	Value	Rating class and limiting features	Value
Pelham	Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00
			Seepage	0.10
LvA:				
Levy	Not limited		Very limited	
			Depth to saturated zone	1.00
MaA:				
Mascotte	Somewhat limited		Very limited	
	Seepage	0.70	Depth to saturated zone	1.00
			Seepage	0.43
MaA:				
Pelham	Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00
			Seepage	0.10
MeA:				
Meldrim	Very limited		Somewhat limited	
	Seepage	1.00	Depth to saturated zone	0.86
			Seepage	0.64
PeA:				
Pelham	Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00
			Seepage	0.10
PkA:				
Pickney	Very limited		Very limited	
	Seepage	1.00	Ponding	1.00
			Depth to saturated zone	1.00
			Seepage	0.42
RaA:				
Rains	Somewhat limited		Very limited	
	Seepage	0.70	Depth to saturated zone	1.00
RbF:				
Remlik	Very limited		Somewhat limited	
	Seepage	1.00	Seepage	0.10
	Slope	0.99		
Blanton	Very limited		Somewhat limited	
	Seepage	1.00	Seepage	0.72
	Slope	0.99		
RdA:				
Ridgeland	Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00
			Seepage	0.86

Table 13.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees	
	Rating class and limiting features	Value	Rating class and limiting features	Value
Boulogne	Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00
			Seepage	0.86
RgA:				
Rigdon	Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00
			Seepage	0.36
RmA:				
Rigdon	Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00
			Seepage	0.36
Mascotte	Somewhat limited		Very limited	
	Seepage	0.70	Depth to saturated zone	1.00
			Seepage	0.43
Urban land	Not limited		Not rated	
StA:				
Stilson	Very limited		Somewhat limited	
	Seepage	1.00	Depth to saturated zone	0.86
SuA:				
Surrency	Very limited		Very limited	
	Seepage	1.00	Ponding	1.00
			Depth to saturated zone	1.00
			Seepage	0.64
Ud:				
Udorthents	Not rated		Not rated	
W:				
Water	Not rated		Not rated	

Table 14.--Engineering Properties

(Absence of an entry indicates that data were not estimated)

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
AbA:												
Albany----------	0-10	Sand, fine sand, loamy sand, loamy fine sand	SP-SC, SM, SC-SM, SP-SM	A-2, A-3, A-4, A-2-4	0	0	100	100	50-85	5-45	0-0	NP-9
	10-47	Sand, fine sand, loamy sand, loamy fine sand	SP-SC, SM, SC-SM, SP-SM	A-4, A-3, A-2-4	0	0	100	100	50-85	5-45	0-0	NP-5
	47-80	Sandy loam, fine sandy loam, sandy clay loam	SC-SM, SM, SC	A-2-4, A-4, A-6	0	0	95-100	90-100	55-90	30-55	15-31	1-13
BdA:												
Bladen----------	0-7	Sandy loam, fine sandy loam	SC-SM, SM, SC	A-4, A-2-4	0	0	95-100	90-100	65-85	35-55	7-25	NP-8
	7-14	Fine sandy loam, sandy loam	SC, SC-SM, SM	A-4, A-2-4	0	0	95-100	90-100	65-85	35-55	7-25	NP-8
	14-80	Clay, sandy clay	SC, CL, CH, MH, SM	A-7-5, A-7-6	0	0	95-100	90-100	75-100	40-95	42-61	18-30
BfB:												
Blanton----------	0-8	Sand, loamy sand	SP-SM	A-3, A-2-4, A-2	0	0	100	90-100	66-80	6-12	0-22	NP-3
	8-70	Sand, loamy sand	SP-SM	A-3, A-2, A-2-4	0	0	100	90-100	66-80	6-12	0-21	NP-3
	70-75	Sandy loam, fine sandy loam, sandy clay loam	SC, SM, SC-SM	A-2-5, A-2, A-2-6, A-6, A-4, A-2-7, A-2-4	0	0	100	95-100	65-94	29-56	20-44	4-18
	75-80	Sandy clay loam, sandy loam, fine sandy loam	SC-SM, SC, SM	A-6, A-2-4, A-2, A-4, A-2-7, A-2-6, A-2-5	0	0	100	95-100	69-96	34-59	22-44	5-18
Foxworth---------	0-9	Fine sand, sand	SP-SM	A-2-4	0	0	100	100	50-70	5-15	8-14	NP-2
	9-80	Sand, fine sand	SP-SM, SM	A-2-4, A-3	0	0	100	100	50-80	5-35	8-14	NP-2

Table 14.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
BuB:												
Blanton----------	0-8	Sand, loamy sand	SP-SM	A-2, A-2-4, A-3	0	0	100	90-100	66-80	6-12	0-22	NP-3
	8-70	Sand, loamy sand	SP-SM	A-3, A-2-4, A-2	0	0	100	90-100	66-80	6-12	0-21	NP-3
	70-75	Sandy loam, fine sandy loam, sandy clay loam	SM, SC-SM, SC	A-2, A-2-5, A-2-6, A-2-7, A-2-4, A-4, A-6	0	0	100	95-100	65-94	29-56	20-44	4-18
	75-80	Sandy clay loam, sandy loam, fine sandy loam	SC, SC-SM, SM	A-2-7, A-2-5, A-2, A-2-4, A-6, A-4, A-2-6	0	0	100	95-100	69-96	34-59	22-44	5-18
BuB:												
Fuquay----------	0-9	Loamy sand, sand	SM, SC-SM	A-2-4, A-1	0	0	95-100	90-100	45-75	15-30	7-20	NP-6
	9-28	Loamy sand, sand	SC-SM, SM	A-2-4, A-1	0	0	95-100	90-100	45-75	5-45	7-20	NP-6
	28-44	Sandy loam, sandy clay loam	SC-SM, SC	A-2-4, A-4, A-6	0	0	95-100	90-100	55-90	25-55	20-30	5-13
	44-63	Sandy clay loam, sandy loam	SC-SM, SC, SM	A-4, A-6, A-2-4	0	0	100	100	80-100	35-80	20-45	6-21
	63-80	Sandy loam, sandy clay loam	SC-SM, SC	A-2-4, A-4, A-6	0	0	95-100	90-100	55-90	25-55	20-30	5-13
Urban land.												
CAA:												
Chastain--------	0-4	Silt loam, silty clay loam, loam	CL-ML, CL, SC-SM, ML	A-4	0	0	76-100	75-100	58-100	40-88	15-30	1-10
	4-36	Clay loam, silty clay loam, silty clay, clay	CH, CL, MH	A-7, A-6	0	0	100	100	69-100	58-91	30-60	10-30
	36-58	Clay loam, silty clay loam, silty clay, clay, sandy clay loam	MH, CL, CH	A-6, A-7	0	0	100	100	82-100	45-85	30-60	10-30
	58-80	Coarse sandy loam, coarse sand, loamy sand, sand, sandy loam	SC, SM, SW-SM	A-2-4	0	0	78-100	77-100	56-92	4-25	5-60	NP-30
Tawcaw----------	0-2	Silty clay loam, silt loam	ML, MH, CL, CH	A-7	0	0	100	100	69-100	59-99	0-60	NP-28
	2-49	Silty clay loam, silty clay, clay	CH, CL	A-6, A-7	0	0	100	100	89-100	79-100	37-72	17-43
	49-80	Loamy sand, sand, coarse sand	SM, SC, SW-SM	A-2-4	0	0	78-100	77-100	55-86	12-31	0-33	NP-10

Table 14.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
ChA:												
Chipley---------	0-8	Sand	SP-SM, SM	A-2-4, A-3	0	0	100	100	50-70	5-15	8-12	NP-2
	8-80	Sand, coarse sand	SP-SM, SM	A-2-4, A-3	0	0	100	100	50-80	5-35	8-12	NP-2
CnA:												
Clarendon-------	0-6	Loamy sand	SC-SM, SM	A-2-4, A-1	0	0	95-100	90-100	45-75	15-30	7-21	NP-6
	6-16	Loamy sand	SC-SM, SM	A-1, A-2-4	0	0	95-100	90-100	45-85	5-55	7-20	NP-8
	16-38	Sandy clay loam, sandy loam	SC, SC-SM	A-2-4, A-6	0	0	95-100	90-100	55-90	25-55	20-30	5-13
	38-62	Sandy clay loam, sandy loam	SC-SM, SC	A-2-4, A-6	0	0	95-100	90-100	55-90	25-55	20-30	5-13
	62-80	Sandy clay loam, sandy loam	SC-SM, SC	A-6, A-2-4	0	0	95-100	90-100	55-90	25-55	20-30	5-13
DaA:												
Dasher----------	0-8	Muck	PT		0	0	---	100	---	---	---	NP
	8-79	Mucky peat	PT		0	0	---	100	---	---	---	NP
DcA:												
Dothan----------	0-9	Loamy sand, sandy loam	SM, SC-SM	A-1, A-2-4, A-4	0	0	95-100	90-100	45-75	15-40	7-21	NP-6
	9-17	Loamy sand, sandy loam	SM, SC-SM	A-4, A-2-4, A-1	0	0	95-100	90-100	45-85	5-55	7-20	NP-8
	17-42	Sandy loam, sandy clay loam	SC-SM, SC	A-2-4, A-4, A-6	0	0	95-100	90-100	55-90	25-55	20-30	5-13
	42-68	Sandy clay loam	SC-SM, SC, SM	A-2-4, A-6, A-4	0	0	100	90-100	80-100	35-80	20-45	6-21
	68-80	Sandy clay loam, sandy loam	SC-SM	A-2-4, A-4, A-6	0	0	95-100	90-100	55-90	25-55	20-30	5-13
Clarendon-------	0-6	Loamy sand	SC-SM, SM	A-1, A-2-4	0	0	95-100	90-100	45-75	15-30	7-21	NP-6
	6-16	Loamy sand	SC-SM, SM	A-2-4, A-1	0	0	95-100	90-100	45-85	5-55	7-20	NP-8
	16-38	Sandy clay loam, sandy loam	SC, SC-SM	A-6, A-2-4	0	0	95-100	90-100	55-90	25-55	20-30	5-13
	38-62	Sandy clay loam, sandy loam	SC-SM, SC	A-2-4, A-6	0	0	95-100	90-100	55-90	25-55	20-30	5-13
	62-80	Sandy clay loam, sandy loam	SC, SC-SM	A-6, A-2-4	0	0	95-100	90-100	55-90	25-55	20-30	5-13

Table 14.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
EcA:												
Echaw----------	0-11	Sand, fine sand, loamy fine sand	SM, SW-SM, SP-SM	A-2-4	0	0	80-100	75-100	40-70	3-15	7-16	NP-3
	11-45	Sand, fine sand, loamy fine sand	SP-SM, SW-SM, SM	A-2-4	0	0	80-100	75-100	40-70	3-15	7-16	NP-3
	45-80	Sand, fine sand, loamy sand	SP-SM, SC-SM, SM	A-2-4, A-4	0	0	100	100	50-85	5-45	0-31	NP-10
Centenary-------	0-5	Sand, fine sand	SC-SM, SM	A-2-4, A-3	0	0	100	100	50-70	5-15	0-26	NP-6
	5-54	Sand, fine sand	SP-SM, SC-SM, SM	A-2-4	0	0	100	100	50-75	5-30	0-27	NP-10
	54-80	Sand, fine sand, loamy sand	SC-SM, SM, SP-SM	A-2-4, A-4	0	0	100	100	50-85	5-45	0-31	NP-10
EuA:												
Eulonia---------	0-8	Sandy loam, loamy sand	SC, SM, SC-SM	A-2-4	0	0	95-100	90-100	55-70	25-40	7-25	NP-8
	8-13	Sandy loam, loamy sand, fine sandy loam	SM, SC-SM, SC	A-2-4, A-4	0	0	95-100	90-100	45-85	10-55	7-25	NP-8
	13-44	Sandy clay, clay, sandy clay loam	SC, CL, CH	A-2-4, A-2-6, A-4, A-6, A-7-6	0	0	95-100	90-100	70-100	30-95	25-60	8-30
	44-80	Sandy clay loam, loamy sand	SC, CL, CH	A-2-4, A-4, A-6, A-7-6	0	0	95-100	90-100	70-100	30-80	25-55	8-25
Bladen----------	0-7	Fine sandy loam, sandy loam	SC-SM, SM, SC	A-4, A-2-4	0	0	95-100	90-100	65-85	35-55	7-25	NP-8
	7-14	Fine sandy loam, sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	95-100	90-100	65-85	35-55	7-25	NP-8
	14-80	Clay, sandy clay	SC, CL, CH, MH, SM	A-7-5, A-7-6	0	0	95-100	90-100	75-100	40-95	42-61	18-30
FoA:												
Foxworth--------	0-9	Fine sand, sand	SM, SP-SM	A-2-4	0	0	100	100	50-70	5-15	8-14	NP-2
	9-80	Sand, fine sand	SM, SP-SM	A-3, A-2-4	0	0	100	100	50-80	5-35	8-14	NP-2
FuA:												
Fuquay----------	0-9	Loamy sand, sand	SM, SC-SM	A-1, A-2-4	0	0	95-100	90-100	45-75	15-30	7-20	NP-6
	9-28	Loamy sand, sand	SC-SM, SM	A-2-4, A-1	0	0	95-100	90-100	45-75	5-45	7-20	NP-6
	28-44	Sandy loam, sandy clay loam	SC-SM, SC	A-2-4, A-4, A-6	0	0	95-100	90-100	55-90	25-55	20-30	5-13
	44-63	Sandy clay loam, sandy loam	SC, SC-SM, SM	A-4, A-6, A-2-4	0	0	100	100	80-100	35-80	20-45	6-21
	63-80	Sandy loam, sandy clay loam	SC-SM	A-2-4, A-4, A-6	0	0	95-100	90-100	55-90	25-55	20-30	5-13

Table 14.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
LeA:												
Leefield--------	0-10	Sand, loamy sand	SC-SM, SM	A-2-4	0	0	95-100	90-100	45-75	15-30	7-21	NP-6
	10-29	Loamy sand, fine sand, sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	90-100	45-85	5-45	7-21	NP-6
	29-34	Sandy loam, sandy clay loam	CL-ML, CL, SC-SM	A-6, A-4, A-2-4	0	0	95-100	90-100	55-90	25-55	20-30	6-11
	34-53	Sandy loam, sandy clay loam	CL-ML, SC-SM, CL	A-6, A-2-4	0	0	95-100	90-100	55-90	25-55	20-40	6-16
	53-71	Sandy loam, sandy clay loam	CL-ML, SC-SM, CL	A-2-4, A-6, A-4	0	0	95-100	90-100	55-90	25-55	20-30	6-11
	71-80	Sandy loam, sandy clay loam	CL-ML, SC-SM, CL	A-6, A-2-4, A-4	0	0	95-100	90-100	55-90	25-55	20-30	6-11
Pelham----------	0-6	Loamy sand, loamy fine sand	SM	A-2	0	0	100	100	50-75	15-30	7-21	2-6
	6-33	Loamy fine sand, loamy sand	SM	A-2	0	0	100	100	40-85	5-45	7-21	2-6
	33-41	Sandy loam, sandy clay loam	SC-SM, SC	A-4, A-2-4, A-6	0	0	100	100	60-90	30-55	7-40	NP-16
	41-66	Sandy loam, sandy clay loam	SC, SC-SM	A-2, A-4, A-6	0	0	100	100	60-90	30-55	7-40	NP-16
	66-80	Sandy loam, loamy sand	SC-SM	A-2-4, A-4	0	0	100	100	50-85	5-55	7-25	NP-8
LnA:												
Leon----------	0-8	Sand, fine sand	SM, SP-SM	A-2-4	0	0	100	100	50-70	5-15	8-12	NP-1
	8-15	Sand, fine sand	SM, SP-SM	A-2-4	0	0	100	100	50-80	5-35	7-11	NP
	15-24	Sand, loamy sand, fine sand	SM, SP-SM	A-4, A-2-4	0	0	100	100	50-85	5-45	9-14	NP-2
	24-33	Sand, fine sand	SP-SM, SM	A-2-4	0	0	100	100	50-80	5-35	8-12	NP-1
	33-80	Sand, fine sand, loamy sand	SM, SP-SM	A-2-4	0	0	100	100	50-80	5-35	9-14	NP-2
Pelham----------	0-6	Loamy sand, loamy fine sand	SM	A-2	0	0	100	100	50-75	15-30	7-21	2-6
	6-33	Loamy sand, loamy fine sand	SM	A-2	0	0	100	100	40-85	5-45	7-21	2-6
	33-41	Sandy loam, sandy clay loam	SC-SM, SC	A-4, A-2-4, A-6	0	0	100	100	60-90	30-55	7-40	NP-16
	41-66	Sandy loam, sandy clay loam	SC, SC-SM	A-6, A-4, A-2	0	0	100	100	60-90	30-55	7-40	NP-16
	66-80	Sandy loam, loamy sand	SC-SM	A-2-4, A-4	0	0	100	100	50-85	5-55	7-25	NP-8
LvA:												
Levy----------	0-4	Silty clay loam	CL	A-6, A-7	0	0	100	100	98-100	85-100	30-65	12-35
	4-80	Silty clay, silty clay loam	CH, CL	A-6, A-7	0	0	100	100	98-100	85-100	35-65	15-35

Table 14.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
MaA:												
Mascotte--------	0-9	Sand, fine sand	SP-SM, SM	A-2-4, A-3	0	0	100	100	50-80	5-35	6-13	NP-2
	9-15	Sand, fine sand	SP-SM, SM	A-2-4, A-3	0	0	100	100	50-80	5-35	6-13	NP-2
	15-37	Sand, fine sand, loamy sand	SP-SM, SM, SC-SM	A-2-4, A-4	0	0	100	100	50-85	5-45	6-16	NP-5
	37-57	Sandy clay loam, sandy loam, fine sandy loam	SC-SM, SC, CL	A-2-4, A-4, A-6	0	0	100	100	60-90	30-55	15-30	4-15
	57-80	Sandy loam, sandy clay loam, fine sandy loam	CL, SC-SM, SC	A-2-4, A-4, A-6	0	0	100	100	60-90	30-55	15-30	4-15
Pelham----------	0-6	Loamy fine sand, loamy sand	SM	A-2	0	0	100	100	50-75	15-30	7-21	2-6
	6-33	Loamy fine sand, loamy sand	SM	A-2	0	0	100	100	40-85	5-45	7-21	2-6
	33-41	Sandy loam, sandy clay loam	SC-SM, SC	A-4, A-2-4, A-6	0	0	100	100	60-90	30-55	7-40	NP-16
	41-66	Sandy loam, sandy clay loam	SC-SM, SC	A-2, A-4, A-6	0	0	100	100	60-90	30-55	7-40	NP-16
	66-80	Sandy loam, loamy sand	SC-SM	A-2-4, A-4	0	0	100	100	50-85	5-55	7-25	NP-8
MeA:												
Meldrim---------	0-5	Sand, fine sand, loamy sand, loamy fine sand	SM	A-2-4, A-1	0	0	100	90-100	40-70	5-15	5-15	NP-3
	5-56	Sand, fine sand, loamy sand, loamy fine sand	SM	A-2-4, A-1	0	0	90-100	85-100	40-70	5-15	5-15	NP-3
	56-80	Sandy loam, fine sandy loam, sandy clay loam	SC, SC-SM, SM	A-4, A-6, A-2-4	0	0	90-100	85-100	45-90	15-55	10-40	1-15
PeA:												
Pelham----------	0-6	Loamy sand, loamy fine sand	SM	A-2	0	0	100	100	50-75	15-30	7-21	2-6
	6-33	Loamy fine sand, loamy sand	SM	A-2	0	0	100	100	40-85	5-45	7-21	2-6
	33-41	Sandy loam, sandy clay loam	SC-SM, SC	A-6, A-2-4, A-4	0	0	100	100	60-90	30-55	7-40	NP-16
	41-66	Sandy loam, sandy clay loam	SC-SM, SC	A-2, A-4, A-6	0	0	100	100	60-90	30-55	7-40	NP-16
	66-80	Sandy loam, loamy sand	SC-SM	A-2-4, A-4	0	0	100	100	50-85	5-55	7-25	NP-8
PkA:												
Pickney---------	0-38	Mucky sand, loamy sand	SM, SP-SM	A-2	0	0	100	100	50-90	10-25	0-14	NP
	38-80	Sand, loamy sand	SW-SM, SC-SM, SM, SP-SM	A-2-4, A-4	0	0	100	100	40-85	5-45	7-21	NP-6

Table 14.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
RaA:												
Rains	0-6	Loamy fine sand, loamy sand, sandy loam	SM, SC-SM, SC	A-4, A-2-4	0	0	95-100	90-100	45-75	15-40	18-43	2-13
	6-18	Loamy fine sand, sandy loam, loamy sand	SC, SM, SC-SM	A-4, A-2-4	0	0	95-100	90-100	45-75	15-40	17-33	2-13
	18-28	Sandy loam, sandy clay loam	SC-SM, SC, CL	A-6, A-2-4, A-7-6	0	0	95-100	90-100	55-95	25-55	26-45	9-25
	28-70	Sandy clay, sandy clay loam	SC, CL	A-7-6, A-6	0	0	95-100	90-100	70-95	30-60	26-54	9-32
	70-80	Sandy clay loam, sandy clay	CL, SC	A-7-6, A-6	0	0	95-100	90-100	70-95	30-60	26-54	9-32
RbF:												
Remlik	0-8	Loamy sand, sand	SM, SP-SM	A-3, A-2-4	0	0	85-100	75-100	50-80	5-20	10-14	NP
	8-30	Loamy sand, sand	SP-SM, SM	A-2-4, A-3	0	0	85-100	75-100	50-80	5-20	10-14	NP
	30-57	Sandy clay loam, sandy loam	SM, SC-SM, SC	A-6, A-4, A-2-4	0	0	90-100	75-100	60-90	30-40	20-40	3-16
	57-80	Sandy clay loam, sandy loam	SC, SC-SM, SM	A-2-4, A-4, A-6	0	0	90-100	75-100	55-90	20-50	20-40	3-16
Blanton	0-8	Sand, loamy sand	SP-SM	A-2, A-2-4, A-3	0	0	100	90-100	66-80	6-12	0-22	NP-3
	8-70	Sand, loamy sand	SP-SM	A-2, A-2-4, A-3	0	0	100	90-100	66-80	6-12	0-21	NP-3
	70-75	Sandy loam, fine sandy loam, sandy clay loam	SM, SC, SC-SM	A-2, A-6, A-2-5, A-2-6, A-2-7, A-2-4, A-4	0	0	100	95-100	65-94	29-56	20-44	4-18
	75-80	Sandy clay loam, sandy loam, fine sandy loam	SC-SM, SC, SM	A-2-7, A-2-6, A-2, A-2-4, A-4, A-6, A-2-5	0	0	100	95-100	69-96	34-59	22-44	5-18
RdA:												
Ridgeland	0-6	Sand, fine sand, loamy fine sand	SM, SW-SM	A-2-4	0	0	80-100	75-100	40-70	3-15	7-16	NP-3
	6-11	Sand, fine sand, loamy sand, loamy fine sand	SM, SC-SM	A-2-4	0	0	95-100	80-100	40-70	5-15	7-16	NP-3
	11-54	Sand, fine sand, loamy sand, loamy fine sand	SP-SM, SM, SC-SM	A-4, A-2-4	0	0	95-100	80-100	40-85	5-45	9-21	NP-6
	54-80	Sand, fine sand, loamy sand, loamy fine sand	SP-SM, SM, SC-SM	A-4, A-2-4	0	0	95-100	80-100	40-85	5-45	9-21	NP-6

Table 14.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
Boulogne--------	0-11	Sand, fine sand	SC-SM, SM	A-2-4	0	0	95-100	80-100	40-70	5-15	7-16	NP-3
	11-16	Sand, fine sand, loamy sand, loamy fine sand	SC-SM, SP-SM, SM	A-2-4, A-4	0	0	95-100	80-100	40-85	5-45	9-21	NP-6
	16-39	Sand, fine sand	SC-SM, SM, SP-SM	A-2-4	0	0	95-100	80-100	40-75	5-30	7-16	NP-3
	39-80	Sand, fine sand, loamy sand, loamy fine sand	SP-SM, SM, SC-SM	A-4, A-2-4	0	0	95-100	80-100	40-85	5-45	9-21	NP-6
RgA:												
Rigdon----------	0-6	Sand, loamy sand	SP-SM, SM, SW-SM	A-2-4, A-2	0	0	100	100	50-70	5-15	7-16	NP-3
	6-11	Sand, fine sand, loamy sand			0	0	100	100	50-85	5-45	7-21	NP-6
	11-36	Sand, loamy sand, fine sand			0	0	100	100	50-85	5-45	7-21	NP-6
	36-80	Sandy loam, sandy clay loam	SC-SM, SC	A-6, A-4, A-2	0	0	100	100	85-100	30-45	20-38	4-15
RmA:												
Rigdon----------	0-6	Sand, loamy sand	SM, SP-SM, SW-SM	A-2, A-2-4	0	0	100	100	50-70	5-15	7-16	NP-3
	6-11	Sand, fine sand, loamy sand			0	0	100	100	50-85	5-45	7-21	NP-6
	11-36	Sand, loamy sand, fine sand			0	0	100	100	50-85	5-45	7-21	NP-6
	36-80	Sandy loam, sandy clay loam	SC, SC-SM	A-6, A-4, A-2	0	0	100	100	85-100	30-45	20-38	4-15
Mascotte--------	0-9	Sand, fine sand	SP-SM, SM	A-2-4, A-3	0	0	100	100	50-80	5-35	6-13	NP-2
	9-15	Sand, fine sand	SP-SM, SM	A-2-4, A-3	0	0	100	100	50-80	5-35	6-13	NP-2
	15-37	Sand, fine sand, loamy sand	SM, SP-SM	A-4, A-2-4	0	0	100	100	50-85	5-45	6-16	NP-5
	37-57	Sandy clay loam, sandy loam, fine sandy loam	SC, SC-SM, CL	A-2-4, A-4, A-6	0	0	100	100	60-90	30-55	15-30	4-15
	57-80	Sandy loam, sandy clay loam, fine sandy loam	CL, SC-SM, SC	A-2-4, A-4, A-6	0	0	100	100	60-90	30-55	15-30	4-15
Urban land.												

Table 14.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
StA:												
Stilson---------	0-9	Loamy sand, sand	SM	A-2, A-2-4	0	0	95-100	90-100	45-75	15-30	6-16	NP-5
	9-26	Sand, loamy sand	SM	A-2	0	0	95-100	90-100	45-75	15-30	6-16	NP-5
	26-35	Sandy loam, sandy clay loam	SM	A-2, A-4	0	0	95-100	90-100	45-75	5-50	6-16	NP-5
	35-61	Sandy clay loam, sandy loam	SC-SM, CL-ML, CL	A-6, A-2-4	0	0	95-100	90-100	55-90	25-55	20-40	6-16
	61-77	Sandy clay loam	SM, SC-SM, SC, CL	A-2, A-4, A-6	0	0	95-100	90-100	55-100	30-80	7-40	NP-16
	77-80	Sandy clay loam, sandy loam	SM	A-4, A-2	0	0	95-100	90-100	45-75	5-50	6-16	NP-5
SuA:												
Surrency--------	0-22	Loamy sand, mucky fine sand, mucky sand, sand	SW-SM, SM, SP-SM	A-2-4	0	0	100	95-100	50-85	5-45	7-16	NP-3
	22-35	Sandy loam, sandy clay loam	SM, SC-SM, SC	A-4, A-2-4	0	0	100	100	60-85	25-55	7-40	NP-16
	35-80	Sandy clay loam, sandy loam	SC, CL	A-2-4, A-4, A-6	0	0	100	100	60-90	30-55	7-40	NP-16
Ud.												
Udorthents												
W.												
Water												

Table 15.--Physical and Chemical Properties of the Soils

(Entries under "Erosion factors--T" apply to the entire profile. Absence of an entry indicates that data were not estimated)

Map symbol and soil name	Depth	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Soil reaction	Organic matter	Erosion factors		
									Kw	Kf	T
	In	Pct	g/cc	In/hr	In/in	Pct	pH	Pct			
AbA:											
Albany	0-10	0-15	1.30-1.60	6-20	0.06-0.11	0.0-0.0	3.6-6.0	0.0-0.5	.10	.10	5
	10-47	0-15	1.30-1.60	6-20	0.06-0.11	0.0-0.0	3.6-6.0	0.0-0.5	.10	.10	
	47-80	5-35	1.30-1.60	0.06-2	0.11-0.17	0.0-2.9	3.6-6.0	0.0-0.5	.15	.15	
BdA:											
Bladen	0-7	5-20	1.40-1.50	0.6-6	0.12-0.16	0.0-2.9	3.6-5.5	1.0-2.0	.32	.32	5
	7-14	5-20	1.40-1.50	0.6-6	0.12-0.16	0.0-2.9	3.6-5.5	1.0-2.0	.32	.32	
	14-80	35-55	1.25-1.45	0.06-0.2	0.08-0.16	3.0-5.9	3.6-5.5	0.0-0.5	.20	.20	
BfB:											
Blanton	0-8	1-7	1.30-1.60	6-20	0.03-0.07	0.0-2.9	4.5-6.0	0.5-1.0	.10	.10	5
	8-70	1-7	1.30-1.60	6-20	0.03-0.07	0.0-2.9	4.5-6.0	0.0-0.8	.10	.10	
	70-75	10-35	1.50-1.65	2-6	0.10-0.15	0.0-2.9	4.5-5.5	0.0-0.5	.15	.15	
	75-80	12-35	1.60-1.70	0.2-2	0.10-0.15	0.0-2.9	4.5-5.5	0.0-0.5	.20	.20	
Foxworth	0-9	1-8	1.60-1.70	6-23	0.06-0.08	0.0-2.9	4.5-6.5	0.5-2.0	.10	.10	5
	9-80	1-8	1.60-1.70	6-23	0.05-0.07	0.0-2.9	4.5-6.5	0.0-0.5	.10	.10	
BuB:											
Blanton	0-8	1-7	1.30-1.60	6-20	0.03-0.07	0.0-2.9	4.5-6.0	0.5-1.0	.10	.10	5
	8-70	1-7	1.30-1.60	6-20	0.03-0.07	0.0-2.9	4.5-6.0	0.0-0.8	.10	.10	
	70-75	10-35	1.50-1.65	2-6	0.10-0.15	0.0-2.9	4.5-5.5	0.0-0.5	.15	.15	
	75-80	12-35	1.60-1.70	0.2-2	0.10-0.15	0.0-2.9	4.5-5.5	0.0-0.5	.20	.20	
Fuquay	0-9	0-15	1.45-1.55	6-20	0.09-0.11	0.0-2.9	4.5-6.0	1.0-2.0	.10	.10	5
	9-28	0-15	1.45-1.60	6-20	0.06-0.11	0.0-2.9	4.5-6.0	0.0-0.5	.20	.20	
	28-44	5-35	1.35-1.50	0.6-6	0.11-0.17	0.0-2.9	4.5-6.0	0.0-0.5	.32	.32	
	44-63	5-35	1.30-1.45	0.2-6	0.08-0.17	0.0-2.9	4.5-6.0	0.0-0.5	.20	.20	
	63-80	5-35	1.35-1.50	0.6-6	0.11-0.17	0.0-2.9	4.5-6.0	0.0-0.5	.32	.32	
Urban land.											
CAA:											
Chastain	0-4	5-40	1.35-1.45	0.6-6	0.20-0.24	3.0-5.0	3.6-6.0	1.0-6.0	.43	.43	4
	4-36	27-60	1.30-1.50	0.06-0.2	0.09-0.20	3.0-5.9	3.5-6.0	1.0-3.0	.20	.20	
	36-58	20-60	1.30-1.50	0.06-0.2	0.09-0.20	3.0-5.9	3.5-6.0	1.0-3.0	.20	.20	
	58-80	0-20	1.50-1.70	6-20	0.06-0.20	0.0-2.9	3.5-6.0	1.0-3.0	.10	.10	
Tawcaw	0-2	0-40	1.30-1.60	0.06-0.2	0.12-0.18	3.0-5.9	4.5-6.5	2.0-5.0	.32	.32	5
	2-49	25-60	1.30-1.60	0.06-0.2	0.12-0.16	3.0-5.9	4.5-6.5	1.0-3.0	.37	.37	
	49-80	0-15	1.50-1.70	6-20	0.06-0.20	0.0-2.9	3.5-6.0	1.0-3.0	.10	.10	
ChA:											
Chipley	0-8	1-5	1.60-1.70	6-23	0.05-0.09	0.0-2.9	4.5-6.0	0.5-2.0	.10	.10	5
	8-80	1-7	1.60-1.70	6-23	0.04-0.06	0.0-2.9	4.5-6.0	0.0-0.5	.10	.10	
CnA:											
Clarendon	0-6	5-15	1.45-1.55	6-20	0.09-0.11	0.0-2.9	4.5-6.5	1.0-2.0	.10	.10	5
	6-16	5-15	1.35-1.60	0.6-20	0.05-0.16	0.0-2.9	4.5-6.5	0.0-0.5	.20	.20	
	16-38	15-35	1.35-1.50	0.6-6	0.11-0.17	0.0-2.9	4.5-6.5	0.0-0.5	.32	.32	
	38-62	15-35	1.35-1.50	0.06-0.6	0.11-0.17	0.0-2.9	4.5-6.5	0.0-0.5	.32	.32	
	62-80	15-35	1.35-1.50	0.06-0.6	0.11-0.17	0.0-2.9	4.5-6.5	0.0-0.5	.32	.32	
DaA:											
Dasher	0-8	0-0	---	0.6-6	0.20-0.25	0.0-2.9	3.6-4.4	40-99	---	---	3
	8-79	0-0	---	2-6	0.20-0.25	0.0-2.9	2.6-4.4	40-99	---	---	

Table 15.--Physical and Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Soil reaction	Organic matter	Erosion factors		
									Kw	Kf	T
	In	Pct	g/cc	In/hr	In/in	Pct	pH	Pct			
DcA:											
Dothan	0-9	0-15	1.45-1.55	6-20	0.09-0.11	0.0-2.9	4.5-6.0	1.0-2.0	.10	.10	5
	9-17	0-15	1.35-1.60	0.6-20	0.05-0.16	0.0-2.9	4.5-6.0	0.0-0.5	.20	.20	
	17-42	5-35	1.35-1.50	0.6-6	0.11-0.17	0.0-2.9	4.5-6.0	0.0-0.5	.32	.32	
	42-68	20-35	1.30-1.45	0.06-0.6	0.08-0.17	0.0-2.9	4.5-6.0	0.0-0.5	.20	.20	
	68-80	15-35	1.35-1.50	0.6-6	0.11-0.17	0.0-2.9	4.5-6.0	0.0-0.5	.32	.32	
DcA:											
Clarendon	0-6	5-15	1.45-1.55	6-20	0.09-0.11	0.0-2.9	4.5-6.5	1.0-2.0	.10	.10	5
	6-16	5-15	1.35-1.60	0.6-20	0.05-0.16	0.0-2.9	4.5-6.5	0.0-0.5	.20	.20	
	16-38	15-35	1.35-1.50	0.6-6	0.11-0.17	0.0-2.9	4.5-6.5	0.0-0.5	.32	.32	
	38-62	15-35	1.35-1.50	0.06-0.6	0.11-0.17	0.0-2.9	4.5-6.5	0.0-0.5	.32	.32	
	62-80	15-35	1.35-1.50	0.06-0.6	0.11-0.17	0.0-2.9	4.5-6.5	0.0-0.5	.32	.32	
EcA:											
Echaw	0-11	0-15	1.50-1.60	6-20	0.06-0.08	0.0-2.9	4.5-6.0	1.0-4.0	.10	.10	5
	11-45	0-15	1.50-1.60	6-20	0.06-0.08	0.0-2.9	4.6-6.0	0.0-0.5	.10	.10	
	45-80	0-15	1.50-1.70	2-20	0.06-0.11	0.0-2.9	4.5-6.0	0.5-2.0	.10	.10	
Centenary	0-5	0-10	1.20-1.50	6-20	0.06-0.08	0.0-2.9	4.5-6.5	0.5-2.0	.10	.10	5
	5-54	0-10	1.40-1.60	6-20	0.06-0.11	0.0-2.9	4.5-6.5	0.0-0.5	.10	.10	
	54-80	0-15	1.50-1.70	2-20	0.06-0.11	0.0-2.9	4.5-6.5	0.5-2.0	.10	.10	
EuA:											
Eulonia	0-8	5-20	1.40-1.50	0.6-6	0.12-0.14	0.0-2.9	4.5-6.5	1.0-2.0	.24	.24	5
	8-13	5-20	1.40-1.55	0.6-20	0.08-0.16	0.0-2.9	4.5-6.5	0.0-0.5	.10	.10	
	13-44	20-55	1.25-1.45	0.2-0.6	0.08-0.17	0.0-2.9	4.5-6.5	0.0-0.5	.20	.20	
	44-80	5-35	1.30-1.45	0.6-2	0.08-0.17	0.0-2.9	4.5-6.0	0.0-0.5	.20	.20	
Bladen	0-7	5-20	1.40-1.50	0.6-6	0.12-0.16	0.0-2.9	3.6-5.5	1.0-2.0	.32	.32	5
	7-14	5-20	1.40-1.50	0.6-6	0.12-0.16	0.0-2.9	3.6-5.5	1.0-2.0	.32	.32	
	14-80	35-55	1.25-1.45	0.06-0.2	0.08-0.16	3.0-5.9	3.6-5.5	0.0-0.5	.20	.20	
FoA:											
Foxworth	0-9	1-8	1.60-1.70	6-23	0.06-0.08	0.0-2.9	4.5-6.5	0.5-2.0	.10	.10	5
	9-80	1-8	1.60-1.70	6-23	0.05-0.07	0.0-2.9	4.5-6.5	0.0-0.5	.10	.10	
FuA:											
Fuquay	0-9	0-15	1.45-1.55	6-20	0.09-0.11	0.0-2.9	4.5-6.0	1.0-2.0	.10	.10	5
	9-28	0-15	1.45-1.60	6-20	0.06-0.11	0.0-2.9	4.5-6.0	0.0-0.5	.20	.20	
	28-44	5-35	1.35-1.50	0.6-6	0.11-0.17	0.0-2.9	4.5-6.0	0.0-0.5	.32	.32	
	44-63	5-35	1.30-1.45	0.2-6	0.08-0.17	0.0-2.9	4.5-6.0	0.0-0.5	.20	.20	
	63-80	5-35	1.35-1.50	0.6-6	0.11-0.17	0.0-2.9	4.5-6.0	0.0-0.5	.32	.32	
LeA:											
Leefield	0-10	0-15	1.45-1.60	6-20	0.08-0.14	0.0-2.9	4.5-5.5	1.0-2.0	.05	.05	5
	10-29	0-15	1.45-1.60	6-20	0.04-0.12	0.0-2.9	4.5-5.5	0.0-0.5	.05	.05	
	29-34	15-25	1.50-1.65	0.6-2	0.12-0.16	0.0-2.9	4.5-5.5	0.0-0.5	.28	.28	
	34-53	15-35	1.50-1.70	0.2-0.6	0.12-0.16	0.0-2.9	4.5-5.5	0.0-0.5	.28	.28	
	53-71	15-25	1.50-1.65	0.6-2	0.12-0.16	0.0-2.9	4.5-5.5	0.0-0.5	.28	.28	
	71-80	15-25	1.50-1.65	0.6-2	0.12-0.16	0.0-2.9	4.5-5.5	0.0-0.5	.28	.28	
Pelham	0-6	5-10	1.45-1.55	6-20	0.09-0.11	0.0-2.9	3.5-5.5	1.0-3.0	.10	.10	5
	6-33	5-10	1.45-1.60	6-20	0.05-0.10	0.0-2.9	3.5-5.5	0.0-0.5	.20	.20	
	33-41	15-30	1.35-1.50	0.6-2	0.11-0.17	0.0-2.9	3.5-5.5	0.0-0.5	.32	.32	
	41-66	15-30	1.35-1.50	0.6-2	0.11-0.17	0.0-2.9	3.5-5.5	0.0-0.5	.32	.32	
	66-80	5-20	1.35-1.60	0.6-20	0.05-0.16	0.0-2.9	3.5-5.5	0.0-0.5	.20	.20	

Table 15.--Physical and Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Soil reaction	Organic matter	Erosion factors		
									Kw	Kf	T
	In	Pct	g/cc	In/hr	In/in	Pct	pH	Pct			
LnA:											
Leon	0-8	1-5	1.05-1.45	6-20	0.06-0.08	0.0-2.9	3.5-6.5	0.5-4.0	.10	.10	5
	8-15	0-4	1.40-1.60	6-20	0.05-0.07	0.0-2.9	3.5-6.5	0.0-0.5	.10	.10	
	15-24	2-8	1.20-1.60	0.6-6	0.06-0.08	0.0-2.9	3.5-6.5	2.0-4.0	.15	.15	
	24-33	1-5	1.45-1.80	2-20	0.05-0.07	0.0-2.9	3.5-6.5	0.0-0.5	.10	.10	
	33-80	2-8	1.50-1.80	0.6-6	0.06-0.08	0.0-2.9	3.5-6.5	1.0-3.0	.15	.15	
Pelham	0-6	5-10	1.45-1.55	6-20	0.09-0.11	0.0-2.9	3.5-5.5	1.0-3.0	.10	.10	5
	6-33	5-10	1.45-1.60	6-20	0.05-0.10	0.0-2.9	3.5-5.5	0.0-0.5	.20	.20	
	33-41	15-30	1.35-1.50	0.6-2	0.11-0.17	0.0-2.9	3.5-5.5	0.0-0.5	.32	.32	
	41-66	15-30	1.35-1.50	0.6-2	0.11-0.17	0.0-2.9	3.5-5.5	0.0-0.5	.32	.32	
	66-80	5-20	1.35-1.60	0.6-20	0.05-0.16	0.0-2.9	3.5-5.5	0.0-0.5	.20	.20	
LvA:											
Levy	0-4	27-50	0.50-1.00	0.06-0.2	0.16-0.22	6.0-8.9	3.6-5.5	5.0-10	.37	.37	5
	4-80	35-60	0.50-1.10	0.06-0.2	0.16-0.22	6.0-8.9	3.6-5.5	2.0-8.0	.32	.32	
MaA:											
Mascotte	0-9	0-10	1.20-1.50	6-20	0.05-0.15	0.0-2.9	3.6-5.5	2.0-7.0	.10	.10	5
	9-15	0-10	1.35-1.55	6-20	0.03-0.08	0.0-2.9	3.6-5.5	0.0-0.5	.10	.10	
	15-37	0-15	1.35-1.50	0.6-2	0.10-0.15	0.0-2.9	3.6-5.5	2.0-4.0	.15	.15	
	37-57	14-35	1.55-1.79	0.2-0.6	0.10-0.16	0.0-2.9	3.6-5.5	0.0-0.5	.24	.24	
	57-80	14-35	1.55-1.79	0.2-0.6	0.10-0.16	0.0-2.9	3.6-5.5	0.0-0.5	.24	.24	
Pelham	0-6	5-10	1.45-1.55	6-20	0.09-0.11	0.0-2.9	3.5-5.5	1.0-3.0	.10	.10	5
	6-33	5-10	1.45-1.60	6-20	0.05-0.10	0.0-2.9	3.5-5.5	0.0-0.5	.20	.20	
	33-41	15-30	1.35-1.50	0.6-2	0.11-0.17	0.0-2.9	3.5-5.5	0.0-0.5	.32	.32	
	41-66	15-30	1.35-1.50	0.6-2	0.11-0.17	0.0-2.9	3.5-5.5	0.0-0.5	.32	.32	
	66-80	5-20	1.35-1.60	0.6-20	0.05-0.16	0.0-2.9	3.5-5.5	0.0-0.5	.20	.20	
MeA:											
Meldrim	0-5	0-10	1.30-1.60	6-20	0.06-0.08	0.0-2.9	4.5-6.0	0.5-1.0	.10	.10	5
	5-56	0-10	1.30-1.60	6-20	0.06-0.08	0.0-2.9	4.5-6.0	0.5-1.0	.10	.10	
	56-80	5-35	1.30-1.70	0.1-2	0.05-0.17	0.0-2.9	4.5-6.0	0.0-0.5	.32	.32	
PeA:											
Pelham	0-6	5-10	1.45-1.55	6-20	0.09-0.11	0.0-2.9	3.5-5.5	1.0-3.0	.10	.10	5
	6-33	5-10	1.45-1.60	6-20	0.05-0.10	0.0-2.9	3.5-5.5	0.0-0.5	.20	.20	
	33-41	15-30	1.35-1.50	0.6-2	0.11-0.17	0.0-2.9	3.5-5.5	0.0-0.5	.32	.32	
	41-66	15-30	1.35-1.50	0.6-2	0.11-0.17	0.0-2.9	3.5-5.5	0.0-0.5	.32	.32	
	66-80	5-20	1.35-1.60	0.6-20	0.05-0.16	0.0-2.9	3.5-5.5	0.0-0.5	.20	.20	
PkA:											
Pickney	0-38	2-10	1.20-1.40	6-20	0.04-0.08	0.0-2.9	3.5-6.0	3.0-15	.10	.10	5
	38-80	0-15	1.45-1.60	6-20	0.05-0.10	0.0-2.9	3.5-6.0	0.0-0.5	.20	.20	
RaA:											
Rains	0-6	5-20	1.15-1.55	2-6	0.13-0.15	0.0-2.9	3.5-5.5	1.0-6.0	.17	.17	5
	6-18	5-20	1.15-1.55	2-6	0.13-0.15	0.0-2.9	3.5-5.5	0.5-1.0	.17	.17	
	18-28	15-35	1.30-1.60	0.6-2	0.12-0.19	0.0-2.9	3.5-5.0	0.5-1.0	.24	.24	
	28-70	15-45	1.30-1.60	0.6-2	0.15-0.19	0.0-2.9	3.5-5.5	0.5-1.0	.15	.15	
	70-80	15-45	1.30-1.60	0.6-2	0.15-0.19	0.0-2.9	3.5-5.5	0.5-1.0	.15	.15	
RbF:											
Remlik	0-8	5-10	1.35-1.45	6-20	0.03-0.05	0.0-2.9	4.5-6.5	0.0-1.0	.15	.15	3
	8-30	5-10	1.35-1.45	6-20	0.03-0.05	0.0-2.9	4.5-6.5	0.0-1.0	.15	.15	
	30-57	15-35	1.55-1.70	0.6-2	0.09-0.12	0.0-2.9	4.5-5.5	0.0-0.2	.24	.24	
	57-80	18-35	1.70-1.80	0.06-0.2	0.06-0.10	0.0-2.9	4.5-5.5	0.0-0.2	.24	.24	

Table 15.--Physical and Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Soil reaction	Organic matter	Erosion factors		
									Kw	Kf	T
	In	Pct	g/cc	In/hr	In/in	Pct	pH	Pct			
Blanton	0-8	1-7	1.30-1.60	6-20	0.03-0.07	0.0-2.9	4.5-6.0	0.5-1.0	.10	.10	5
	8-70	1-7	1.30-1.60	6-20	0.03-0.07	0.0-2.9	4.5-6.0	0.0-0.8	.10	.10	
	70-75	10-35	1.50-1.65	2-6	0.10-0.15	0.0-2.9	4.5-5.5	0.0-0.5	.15	.15	
	75-80	12-35	1.60-1.70	0.2-2	0.10-0.15	0.0-2.9	4.5-5.5	0.0-0.5	.20	.20	
RdA:											
Ridgeland	0-6	0-15	1.50-1.60	6-20	0.06-0.08	0.0-2.9	3.5-6.5	1.0-4.0	.10	.10	5
	6-11	0-15	1.20-1.50	6-20	0.06-0.08	0.0-2.9	3.5-6.5	1.0-5.0	.10	.10	
	11-54	0-15	1.50-1.70	2-6	0.06-0.11	0.0-2.9	3.5-6.5	1.0-4.0	.15	.15	
	54-80	0-15	1.50-1.70	2-6	0.06-0.11	0.0-2.9	3.5-6.5	1.0-4.0	.15	.15	
Boulogne	0-11	0-15	1.20-1.50	6-20	0.06-0.08	0.0-2.9	3.5-6.0	1.0-5.0	.10	.10	5
	11-16	0-15	1.50-1.70	2-6	0.06-0.11	0.0-2.9	3.5-6.0	1.0-4.0	.15	.15	
	16-39	0-15	1.40-1.60	6-20	0.06-0.08	0.0-2.9	3.5-6.0	0.0-1.0	.10	.10	
	39-80	0-15	1.50-1.70	2-6	0.06-0.11	0.0-2.9	3.5-6.0	1.0-4.0	.15	.15	
RgA:											
Rigdon	0-6	0-10	1.50-1.60	6-20	0.06-0.08	0.0-2.9	3.5-5.5	1.0-4.0	.10	.10	5
	6-11	0-15	1.45-1.60	6-20	0.05-0.10	0.0-2.9	3.5-5.5	1.0-4.0	.20	.20	
	11-36	0-15	1.45-1.60	6-20	0.05-0.10	0.0-2.9	3.5-5.5	0.0-0.5	.20	.20	
	36-80	15-35	1.45-1.65	0.6-2	0.10-0.15	0.0-2.9	3.5-5.5	0.0-0.5	.20	.20	
RmA:											
Rigdon	0-6	0-10	1.50-1.60	6-20	0.06-0.08	0.0-2.9	3.5-5.5	1.0-4.0	.10	.10	5
	6-11	0-15	1.45-1.60	6-20	0.05-0.10	0.0-2.9	3.5-5.5	1.0-4.0	.20	.20	
	11-36	0-15	1.45-1.60	6-20	0.05-0.10	0.0-2.9	3.5-5.5	0.0-0.5	.20	.20	
	36-80	15-35	1.45-1.65	0.6-2	0.10-0.15	0.0-2.9	3.5-5.5	0.0-0.5	.20	.20	
RmA:											
Mascotte	0-9	0-10	1.20-1.50	6-20	0.05-0.15	0.0-2.9	3.6-5.5	2.0-7.0	.10	.10	5
	9-15	0-10	1.35-1.55	6-20	0.03-0.08	0.0-2.9	3.6-5.5	0.0-0.5	.10	.10	
	15-37	0-15	1.35-1.50	0.6-2	0.10-0.15	0.0-2.9	3.6-5.5	2.0-4.0	.15	.15	
	37-57	14-35	1.55-1.79	0.2-0.6	0.10-0.16	0.0-2.9	3.6-5.5	0.0-0.5	.24	.24	
	57-80	14-35	1.55-1.79	0.2-0.6	0.10-0.16	0.0-2.9	3.6-5.5	0.0-0.5	.24	.24	
Urban land.											
StA:											
Stilson	0-9	0-15	1.55-1.65	6-20	0.09-0.11	0.0-2.9	4.5-5.5	1.0-2.0	.10	.10	5
	9-26	0-15	1.55-1.65	6-20	0.09-0.11	0.0-2.9	4.5-5.5	1.0-2.0	.10	.10	
	26-35	15-35	1.55-1.70	6-20	0.06-0.09	0.0-2.9	4.5-5.5	0.0-0.5	.10	.10	
	35-61	15-35	1.50-1.70	0.2-0.6	0.12-0.16	0.0-2.9	4.5-5.5	0.0-0.5	.28	.28	
	61-77	20-35	1.40-1.55	0.6-6	0.11-0.17	0.0-2.9	4.5-5.5	0.0-0.5	.32	.32	
	77-80	10-35	1.55-1.70	6-20	0.06-0.09	0.0-2.9	4.5-5.5	0.0-0.5	.10	.10	
SuA:											
Surrency	0-22	0-10	1.50-1.60	6-20	0.12-0.14	0.0-2.9	3.5-5.5	10-18	.10	.10	5
	22-35	5-35	1.35-1.50	0.6-2	0.11-0.17	0.0-2.9	3.5-5.5	0.0-0.5	.24	.24	
	35-80	15-35	1.35-1.50	0.2-0.6	0.11-0.17	0.0-2.9	3.5-5.5	0.0-0.5	.15	.15	
Ud. Udorthents											
W. Water											

Table 16.--Water Features

(Depths of layers are in feet. See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a concern or that data were not estimated)

Map symbol and soil name	Hydrologic group	Months	Water table		Ponding			Flooding	
			Upper limit	Kind	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft		Ft				
AbA:									
Albany----------	C	Jan-Apr	1.0-2.5	Apparent	---	---	None	---	None
		May	2.5-6.6	Apparent	---	---	None	---	None
		Jun-Oct	>6.0	---	---	---	None	---	None
		Nov	2.5-6.6	Apparent	---	---	None	---	None
		Dec	1.0-2.5	Apparent	---	---	None	---	None
BdA:									
Bladen----------	D	Jan-Apr	0.0-1.0	Apparent	---	---	None	---	None
		May	1.0-6.6	Apparent	---	---	None	---	None
		Jun-Oct	>6.0	---	---	---	None	---	None
		Nov	1.0-6.6	Apparent	---	---	None	---	None
		Dec	0.0-1.0	Apparent	---	---	None	---	None
BfB:									
Blanton---------	A	Jan-Apr	4.0-6.0	Perched	---	---	None	---	None
		May-Nov	>6.0	---	---	---	None	---	None
		Dec	4.0-6.0	Perched	---	---	None	---	None
Foxworth--------	A	Jan-Apr	4.0-6.0	Apparent	---	---	None	---	None
		May	6.0-6.6	Apparent	---	---	None	---	None
		Jun-Oct	>6.0	---	---	---	None	---	None
		Nov	6.0-6.6	Apparent	---	---	None	---	None
		Dec	4.0-6.6	Apparent	---	---	None	---	None
BuB:									
Blanton---------	A	Jan-Apr	4.0-6.0	Perched	---	---	None	---	None
		May-Nov	>6.0	---	---	---	None	---	None
		Dec	4.0-6.0	Perched	---	---	None	---	None
Fuquay----------	B	Jan-Mar	4.0-6.0	Perched	---	---	None	---	None
		Apr-Nov	>6.0	---	---	---	None	---	None
		Dec	4.0-6.0	Perched	---	---	None	---	None
Urban land.									
CAA:									
Chastain--------	D	Jan-Apr	0.0-1.0	Apparent	---	---	None	Very long	Frequent
		May-Jun	1.0-2.7	Apparent	---	---	None	---	---
		Jul	4.0-5.0	Apparent	---	---	None	---	---
		Aug-Sep	>6.0	---	---	---	None	---	---
		Oct	4.0-5.0	Apparent	---	---	None	---	---
		Nov-Dec	0.0-1.0	Apparent	---	---	None	Very long	Frequent
Tawcaw----------	C	Jan-Apr	1.5-2.5	Apparent	---	---	None	Brief	Frequent
		May-Oct	---	---	---	---	None	---	---
		Nov-Dec	1.5-2.5	Apparent	---	---	None	Brief	Frequent
ChA:									
Chipley---------	C	Jan-Apr	2.0-3.0	Apparent	---	---	None	---	None
		May	3.0-6.6	Apparent	---	---	None	---	None
		Jun-Oct	>6.0	---	---	---	None	---	None
		Nov	3.0-6.6	Apparent	---	---	None	---	None
		Dec	2.0-3.0	Apparent	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Months	Water table		Ponding			Flooding	
			Upper limit	Kind	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft		Ft				
CnA:									
Clarendon-------	C	Jan-Mar	2.0-3.0	Apparent	---	---	None	---	None
		Apr-Oct	>6.0	---	---	---	None	---	None
		Nov	3.0-6.6	Apparent	---	---	None	---	None
		Dec	2.0-3.0	Apparent	---	---	None	---	None
DaA:									
Dasher----------	D	Jan-Aug	0	Apparent	0.0-3.0	Long	Frequent	---	None
		Sep-Oct	0	Apparent	---	---	---	---	None
		Nov-Dec	0	Apparent	0.0-3.0	Long	Frequent	---	None
DcA:									
Dothan----------	B	Jan	3.0-5.0	Perched	---	---	None	---	None
		Feb-May	3.0-5.0	Apparent	---	---	None	---	None
		Jun-Nov	>6.0	---	---	---	None	---	None
		Dec	3.0-5.0	Perched	---	---	None	---	None
Clarendon-------	C	Jan-Mar	2.0-3.0	Apparent	---	---	None	---	None
		Apr-Oct	>6.0	---	---	---	None	---	None
		Nov	3.0-6.6	Apparent	---	---	None	---	None
		Dec	2.0-3.0	Apparent	---	---	None	---	None
EcA:									
Echaw-----------	A	Jan-May	2.5-3.5	Apparent	---	---	None	---	None
		Jun-Oct	>6.0	---	---	---	None	---	None
		Nov	3.5-6.6	Apparent	---	---	None	---	None
		Dec	2.5-3.5	Apparent	---	---	None	---	None
Centenary-------	A	Jan-Apr	3.5-5.0	Apparent	---	---	None	---	None
		May	5.0-6.6	Apparent	---	---	None	---	None
		Jun-Oct	>6.0	---	---	---	None	---	None
		Nov	5.0-6.6	Apparent	---	---	None	---	None
		Dec	3.5-5.0	Apparent	---	---	None	---	None
EuA:									
Eulonia---------	C	Jan-Apr	1.5-3.5	Apparent	---	---	None	---	None
		May	1.5-6.6	Apparent	---	---	None	---	None
		Jun-Oct	>6.0	---	---	---	None	---	None
		Nov	1.5-6.6	Apparent	---	---	None	---	None
		Dec	1.5-3.5	Apparent	---	---	None	---	None
Bladen----------	D	Jan-Apr	0.0-1.0	Apparent	---	---	None	---	None
		May	1.0-6.6	Apparent	---	---	None	---	None
		Jun-Oct	>6.0	---	---	---	None	---	None
		Nov	1.0-6.6	Apparent	---	---	None	---	None
		Dec	0.0-1.0	Apparent	---	---	None	---	None
FoA:									
Foxworth--------	A	Jan-Apr	4.0-6.0	Apparent	---	---	None	---	None
		May	6.0-6.6	Apparent	---	---	None	---	None
		Jun-Oct	>6.0	---	---	---	None	---	None
		Nov	6.0-6.6	Apparent	---	---	None	---	None
		Dec	4.0-6.6	Apparent	---	---	None	---	None
FuA:									
Fuquay----------	B	Jan-Mar	4.0-6.0	Perched	---	---	None	---	None
		Apr-Nov	>6.0	---	---	---	None	---	None
		Dec	4.0-6.0	Perched	---	---	None	---	None

Table 16.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Months	Water table		Ponding			Flooding	
			Upper limit	Kind	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft		Ft				
LeA:									
Leefield	C	Jan-Apr	1.5-2.5	Apparent	---	---	None	---	None
		May	2.5-6.6	Apparent	---	---	None	---	None
		Jun-Oct	>6.0	---	---	---	None	---	None
		Nov	2.5-6.6	Apparent	---	---	None	---	None
		Dec	1.5-2.5	Apparent	---	---	None	---	None
Pelham	B/D	Jan-May	0.0-1.0	Apparent	---	---	None	---	None
		Jun-Oct	0.0-6.6	Apparent	---	---	None	---	None
		Nov	0.0-1.5	Apparent	---	---	None	---	None
		Dec	0.0-1.0	Apparent	---	---	None	---	None
LnA:									
Leon	B/D	Jan-Apr	0.5-1.5	Apparent	---	---	None	---	None
		May	1.5-6.6	Apparent	---	---	None	---	None
		Jun-Oct	>6.0	---	---	---	None	---	None
		Nov	1.5-6.6	Apparent	---	---	None	---	None
		Dec	0.5-1.5	Apparent	---	---	None	---	None
LnA:									
Pelham	B/D	Jan-May	0.0-1.0	Apparent	---	---	None	---	None
		Jun-Oct	0.0-6.6	Apparent	---	---	None	---	None
		Nov	0.0-1.5	Apparent	---	---	None	---	None
		Dec	0.0-1.0	Apparent	---	---	None	---	None
LvA:									
Levy	D	Jan-Dec	0	Apparent	---	---	None	Very long	Very frequent
MaA:									
Mascotte	B/D	Jan-Apr	0.5-1.5	Apparent	---	---	None	---	None
		May	1.5-6.6	Apparent	---	---	None	---	None
		Jun-Oct	>6.0	---	---	---	None	---	None
		Nov	1.5-6.6	Apparent	---	---	None	---	None
		Dec	0.5-1.5	Apparent	---	---	None	---	None
Pelham	B/D	Jan-May	0.0-1.0	Apparent	---	---	None	---	None
		Jun-Oct	0.0-6.6	Apparent	---	---	None	---	None
		Nov	0.0-1.5	Apparent	---	---	None	---	None
		Dec	0.0-1.0	Apparent	---	---	None	---	None
MeA:									
Meldrim	A	Jan-May	2.5-3.3	Apparent	---	---	None	---	None
		Jun-Oct	>6.0	---	---	---	None	---	None
		Nov-Dec	2.5-3.3	Apparent	---	---	None	---	None
PeA:									
Pelham	B/D	Jan-May	0.0-1.0	Apparent	---	---	None	---	None
		Jun-Oct	0.0-6.6	Apparent	---	---	None	---	None
		Nov	0.0-1.5	Apparent	---	---	None	---	None
		Dec	0.0-1.0	Apparent	---	---	None	---	None
PkA:									
Pickney	A/D	Jan-Apr	0	Apparent	0.0-1.0	Long	Frequent	Long	Frequent
		May-Jun	0	Apparent	---	---	---	---	---
		Jul-Oct	>6.0	---	---	---	---	---	---
		Nov-Dec	0	Apparent	0.0-1.0	Long	Frequent	Long	Frequent

Table 16.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Months	Water table		Ponding			Flooding	
			Upper limit	Kind	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft		Ft				
RaA:									
Rains	B/D	Jan-Apr	0.0-1.0	Apparent	---	---	None	---	None
		May	1.0-6.6	Apparent	---	---	None	---	None
		Jun-Oct	>6.0	---	---	---	None	---	None
		Nov	1.0-6.6	Apparent	---	---	None	---	None
		Dec	0.0-1.0	Apparent	---	---	None	---	None
RbF:									
Remlik	B	Jan-Dec	>6.0	---	---	---	None	---	None
Blanton	A	Jan-Apr	4.0-6.0	Perched	---	---	None	---	None
		May-Nov	>6.0	---	---	---	None	---	None
		Dec	4.0-6.0	Perched	---	---	None	---	None
RdA:									
Ridgeland	B/D	Jan-Apr	1.5-2.5	Apparent	---	---	None	---	None
		May	2.5-6.6	Apparent	---	---	None	---	None
		Jun-Sep	>6.0	---	---	---	None	---	None
		Oct	2.5-6.6	Apparent	---	---	None	---	None
		Nov-Dec	1.5-2.5	Apparent	---	---	None	---	None
Boulogne	B/D	Jan-Jul	0.5-1.5	Apparent	---	---	None	---	None
		Aug-Nov	1.5-6.6	Apparent	---	---	None	---	None
		Dec	0.5-1.5	Apparent	---	---	None	---	None
RgA:									
Rigdon	C	Jan-Apr	1.5-2.5	Apparent	---	---	None	---	None
		May	2.5-6.6	Apparent	---	---	None	---	None
		Jun-Sep	>6.0	---	---	---	None	---	None
		Oct	2.5-6.6	Apparent	---	---	None	---	None
		Nov-Dec	1.5-2.5	Apparent	---	---	None	---	None
RmA:									
Rigdon	C	Jan-Apr	1.5-2.5	Apparent	---	---	None	---	None
		May	2.5-6.6	Apparent	---	---	None	---	None
		Jun-Sep	>6.0	---	---	---	None	---	None
		Oct	2.5-6.6	Apparent	---	---	None	---	None
		Nov-Dec	1.5-2.5	Apparent	---	---	None	---	None
Mascotte	B/D	Jan-Apr	0.5-1.5	Apparent	---	---	None	---	None
		May	1.5-6.6	Apparent	---	---	None	---	None
		Jun-Oct	>6.0	---	---	---	None	---	None
		Nov	1.5-6.6	Apparent	---	---	None	---	None
		Dec	0.5-1.5	Apparent	---	---	None	---	None
Urban land.									
StA:									
Stilson	B	Jan-Apr	2.5-3.5	Apparent	---	---	None	---	None
		May	3.5-6.6	Apparent	---	---	None	---	None
		Jun-Nov	>6.0	---	---	---	None	---	None
		Dec	2.5-3.5	Apparent	---	---	None	---	None
SuA:									
Surrency	D	Jan-Apr	0	Apparent	0.0-1.0	Long	Frequent	Long	Frequent
		May-Oct	0.0-0.5	Apparent	---	---	---	---	---
		Nov-Dec	0	Apparent	0.0-1.0	Long	Frequent	Long	Frequent

Table 16.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Months	Water table		Ponding			Flooding	
			Upper limit	Kind	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft		Ft				
Ud. Udorthents									
W. Water									

Table 17.--Soil Features

(See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a concern or that data were not estimated)

Map symbol and soil name	Restrictive layer			Risk of corrosion	
	Kind	Depth to top	Hardness	Uncoated steel	Concrete
		In	In		In
AbA:					
Albany	---	---	---	High	High
BdA:					
Bladen	---	---	---	High	High
BfB:					
Blanton	---	---	---	High	High
Foxworth	---	---	---	Low	Moderate
BuB:					
Blanton	---	---	---	High	High
Fuquay	---	---	---	Low	Moderate
Urban land.					
CAA:					
Chastain	---	---	---	High	High
Tawcaw	---	---	---	High	High
ChA:					
Chipley	---	---	---	Low	High
CnA:					
Clarendon	---	---	---	Moderate	High
DaA:					
Dasher	---	---	---	High	High
DcA:					
Dothan	---	---	---	Moderate	Moderate
Clarendon	---	---	---	Moderate	High
EcA:					
Echaw	---	---	---	Low	High
Centenary	---	---	---	Moderate	High
EuA:					
Eulonia	---	---	---	Moderate	High
Bladen	---	---	---	High	High
FoA:					
Foxworth	---	---	---	Low	Moderate
FuA:					
Fuquay	---	---	---	Low	Moderate
LeA:					
Leefield	---	---	---	Moderate	High
Pelham	---	---	---	High	High

Table 17.--Soil Features--Continued

Map symbol and soil name	Restrictive layer			Risk of corrosion	
	Kind	Depth to top	Hardness	Uncoated steel	Concrete
		In	In		In
LnA:					
Leon	---	---	---	High	High
Pelham	---	---	---	High	High
LvA:					
Levy	---	---	---	High	High
MaA:					
Mascotte	---	---	---	High	High
Pelham	---	---	---	High	High
MeA:					
Meldrim	---	---	---	High	High
PeA:					
Pelham	---	---	---	High	High
PkA:					
Pickney	---	---	---	High	High
RaA:					
Rains	---	---	---	High	High
RbF:					
Remlik	---	---	---	Moderate	Moderate
Blanton	---	---	---	High	High
RdA:					
Ridgeland	---	---	---	Moderate	High
Boulogne	---	---	---	High	High
RgA:					
Rigdon	---	---	---	High	High
RmA:					
Rigdon	---	---	---	High	High
Mascotte	---	---	---	High	High
Urban land.					
StA:					
Stilson	---	---	---	Moderate	High
SuA:					
Surrency	---	---	---	High	High
Ud.					
Udorthents					
W.					
Water					

Table 18.--Taxonomic Classification of the Soils

Soil name	Family or higher taxonomic class
Albany	Loamy, siliceous, subactive, thermic Aquic Arenic Paleudults
Bladen	Fine, mixed, semiactive, thermic Typic Albaquults
Blanton	Loamy, siliceous, semiactive, thermic Grossarenic Paleudults
Boulogne	Sandy, siliceous, thermic Typic Alaquods
Centenary	Sandy, siliceous, thermic Entic Grossarenic Alorthods
Chastain	Fine, mixed, semiactive, acid, thermic Fluvaquentic Endoaquepts
Chipley	Thermic, coated Aquic Quartzipsamments
Clarendon	Fine-loamy, siliceous, semiactive, thermic Plinthaquic Paleudults
Dasher	Dysic, thermic Typic Haplohemists
Dothan	Fine-loamy, kaolinitic, thermic Plinthic Kandiudults
Echaw	Sandy, siliceous, thermic Oxyaquic Alorthods
Eulonia	Fine, mixed, subactive, thermic Aquic Hapludults
Foxworth	Thermic, coated Typic Quartzipsamments
Fuquay	Loamy, kaolinitic, thermic Arenic Plinthic Kandiudults
Leefield	Loamy, siliceous, subactive, thermic Arenic Plinthaquic Paleudults
Leon	Sandy, siliceous, thermic Aeric Alaquods
Levy	Fine, mixed, superactive, acid, thermic Typic Hydraquents
Mascotte	Sandy over loamy, siliceous, active, thermic Ultic Alaquods
Meldrim	Loamy, siliceous, semiactive, thermic Oxyaquic Paleudults
Pelham	Loamy, siliceous, subactive, thermic Arenic Paleaquults
Pickney	Sandy, siliceous, thermic Cumulic Humaquepts
Rains	Fine-loamy, siliceous, semiactive, thermic Typic Paleaquults
Remlik	Loamy, kaolinitic, thermic Arenic Kanhapludults
Ridgeland	Sandy, siliceous, thermic Oxyaquic Alorthods
Rigdon	Sandy, siliceous, thermic Oxyaquic Alorthods
Stilson	Loamy, siliceous, subactive, thermic Arenic Plinthic Paleudults
Surrency	Loamy, siliceous, semiactive, thermic Arenic Umbric Paleaquults
Tawcaw	Fine, kaolinitic, thermic Fluvaquentic Dystrudepts
Udorthents	Udorthents

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